Early-Adolescent Experiences of Physical Activity: A Sociology of Childhood Approach

By

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Participation in physical activity is the most significant contributor to health and can bring joy, community and psychological well-being. Low rates of physical activity participation are causing national and international alarm. Only 7 per cent of Canadian children and youth receive adequate amounts and intensity of physical activity. Attrition occurs over adolescence, and childhood and adolescent participation influences lifelong participation. Utilizing feminist and sociology of childhood frameworks, this mixed method study explored the physical activity (PA) experiences of 25 middle school students. Findings include that these early adolescents were more active than national averages, that they enjoyed and valued physical activity, that their PA experiences were significantly impacted by their environment, and that they themselves knew what they wanted and what worked for positive participation experiences. School structures, facilities, programming and personnel, the built environment, friends and family were the most significant influences on participation experience. The author concludes that: 1) some populations of young people in some geographic circumstances are more engaged in physical activity and have a more positive attitude than often assumed; 2) researchers, program developers and, most importantly, policy makers concerned with physical activity participation, attrition, and public health must recognize that structures impose sedentaryism, and that individuals’ sense of responsibility for their own health behaviours alone is inadequate in creating an active population; 3) young people have authentic, credible knowledge and their observations, experiences and voice hold key insights to their own sustainable or increased participation in physical activities; and 4) young people need to be listened to and included as
participants in the design of the structures that create the social, physical and educational environments in which they learn and live. Recommendations for policy, programming and future research are presented.
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Chapter 1: Introduction

Background

Visualize children skipping on a sidewalk and playing ball in a park and people walking home from work – these are decreasingly common realities. Children sitting still indoors while engaged with technology and adults making long automobile drives to and from work are the more likely activities of contemporary society. Increasingly sedentary lifestyles have created decreasingly fit populations and it is now widely known that the majority of people in the developed world are inactive and unfit. The cost of inactivity includes health, well-being and economic tolls and the deprivation of the joy of physical activity. Children are too inactive for optimal growth and development and levels of participation in physical activities falls over the life course with a particular drop during adolescence. The problem is worsening, is coupled with alarm over obesity rates, and has drawn increasing attention from researchers and governments. A large quantity of data profiling the activities of Canadians has been generated yet a full understanding of the problem, and a solution, have not yet been achieved. The majority of Canadians is inactive and unfit (Canadian Fitness and Lifestyle Research Institute [CFLRI], 2000, 2008; Colley, Garriguet, Janssen, Craig, Clarke & Tremblay, 2011). There has been a slight recent increase to about half of Canadians over 20 years old at moderate activity levels (CFLRI, 2015) and a recent decrease among teens to only 5 per cent (from 7 per cent in 2007) engaging in adequate exercise levels (Participation, 2015). Exercise is the single most effective lifestyle contributor to good health but over three quarters of Canadians are not active enough to sustain optimal health, placing them at a significantly higher risk of heart disease, obesity, diabetes, some cancers and increased risk of osteoporosis (Warburton, Nicol & Bredin, 2006). Inactivity
deprives people of the pleasure of fitness and activity, mental, social and emotional health. It has been established that the patterns of participation in early life predict those of later life (Eithsdottir, Kristjansson, Sigfusdottir, & Allegrante, 2008; Kjonniksen, Anderssen & Wold, 2009; Lee, Brugeson, Fulton & Spain, 2007; Le Masurier, 2004; Lunn 2010; Rhodes, Macdonald & McKay, 2006; Massie, 2002; Pfeiffer, Dowda, Dishman, Sirard & Pate, 2007; Ruiz, 2000) and over the life course participation levels drop – notably during adolescence. Boys and men are more active than girls and women and the drop is greater among girls. The transition from childhood to adolescence is a crucial time as children leave spontaneous play, outdoor recess breaks at school and childhood notions of gender roles and play behind, they enter early adolescence and new patterns of physical activities.

The cost of inactivity is formidable. It includes an economic price of 3.7 billion Canadian Health Care dollars through indirect costs and 1.6 billion in direct costs annually (Katzmarzyk & Janssen, 2004) and the price of premature death - 21,000 in Canada in 1995 (Katzmarzyk, Gledhill & Shephard, 2000). It is estimated that Canadian death rates from diabetes, colon cancer and cardiovascular disease would lessen by 26, 20 and 22 per cent respectively with active lifestyles (CFLRI, 2005) and that 23 per cent of deaths in the United States are due to sedentary lifestyles (National Association of Physical Activity and Health [NAPAH], 2006b). Policy makers at all levels require data indicating what changes could lead to a more active, fit and healthy population.

Early adolescents are a critical age group on which to focus research. Limited research on the early influences of physical activity (Massie, 2002) and a persistent “unexplained variance in exercise behavior” (Nigg, 2003) make studying participation at early adolescence a strategic point from which to understand lifespan patterns. The problem of non-participation in physical
activity is multi-faceted and benefits from contributions from a range of academic disciplines and methods of inquiry. This dissertation approaches the problem of chronic, crisis level physical inactivity among Western, particularly Canadian, populations through a close exploration of early adolescent experiences of participation in physical activities. Using sociology of childhood and feminist theoretical frameworks, I conducted a mixed method, largely qualitative, study in a Canadian middle school exploring all aspects of the participants’ use of time and experiences of physical activity. The participants’ opinions, preferences, opportunities, wishes and hopes with regard to in- and out-of-school, structured and unstructured, formal and informal physical activities, and the places, spaces, programs in which they did, or did not, occur are captured and expressed. In keeping with a sociology of childhood framework, the study provided participants with the opportunity to be heard, in their own voices, conveying their own understanding of their lived experiences. The results are intended for the adults who influence the research, teaching and creation of child and adolescent learning, working, living and play environments and programs, to further the cause of activity for all, with sensitivity, knowledge and responsibility to create what could be the best mixture of features for successfully active adolescent lives that will carry on into active adulthoods.

The remainder of this chapter will further explain benefits of physical activity, the established patterns of participation by Canadians, the age focus of the project, the purpose and rationale of this study and the research questions.

**Benefits of Physical Activity**

Participation in physical activities brings reduced illness and expense, increased joy and personal well-being as well as community and societal benefits. Exercise is the simplest and most effective form of preventative medicine, reducing morbidity and several chronic
degenerative diseases including cardiovascular disease and obesity (Trost, Pate, Dowda, Saunders, Ward and Felton, 1996; Ransdell & Wells, 1997; Sallo, Harro & Viru, 1997; Savage & Scott, 1998, Tremblay & Williams, 2001; NAPAH, 2006b; Warburton et al., 2006). Participation in physical activity (PPA) reduces the risk of diabetes, heart disease, hypertension and resulting premature death. Osteoporosis, back pain and some cancers are reduced or prevented with exercise (Public Health Agency of Canada [PHAC], 2003). General sense of well-being, self-esteem, academic performance and mental health can also be enhanced with physical exercise (Canadian Association of Health Physical Recreation and Dance [CAHPRD], 2006; NAPAH, 2006a; Sacker & Cable, 2005). Workplace attendance and satisfaction improve with activity; strength, balance, flexibility and coordination are better maintained throughout the aging process - a significant health factor among the elderly for fall prevention (PHAC, 2003).

Childhood obesity has gained the attention of the public eye, academic research and government. Twenty-six per cent of Canadian children ages two to seventeen were obese or overweight in 2004 (Statistics Canada, 2004) – an increase of 13 per cent from the previous six years of data (Statistics Canada, 2002). In 2014 Statistics Canada reported that 54 per cent of Canadian adults and 23.1 per cent of Canadian youth were obese or overweight (Statistics Canada, 2014). The percentage of overweight young people has been generally increasing and almost doubled among those ages six to eleven, and almost tripled among those ages twelve to nineteen between the mid 1980s and 2006 (NAPAH, 2006b). Childhood obesity also predicts the likelihood of adulthood obesity (Serdula, Ivery, Coates, Freedman, Williamson & Byers, 1993). Newer findings clearly articulate the risks. Arteries in obese children can resemble those of middle-aged adults, drastically increasing the risk of heart disease and premature death (NAPAH,
Exercise is the key to preventing and reducing obesity and is much more effective than diet alone (NAPAH, 2006a; Tremblay & Williams, 2001).

Participation in physical activities carries social benefits. It can provide people with connection to their communities and to themselves. Behavioural and community benefits are generated from regular physical activities, particularly if those activities are shared with a group of people. Promoting equitable access to, and participation in, physical activities also sustains the values of a progressive democracy. To some the economic argument is problematic.

...if the emphasis is solely on the economic costs of inactivity, there is the danger of reducing the full humanity of women and men, so that they become cogs in an economic machine rather than citizens in a democratic country with well-founded expectations that social justice and equity, as well as health and economic security, should prevail. (Lenskyj, 2008 p.108)

Some authors (e.g., Grosz, 2003; Wedgewood, 2004) see participation in sports and the healthful use of one’s body as a way of living powerfully, challenging norms or expanding oneself. Active, healthy living bears so many positive attributes it warrants continued investigation and activism for the benefit of all.

**Participation Patterns**

The Canadian government has sponsored broad studies of the activity levels and choices of Canadians over the past ten years. These data create a comprehensive picture. The *Physical Activity Monitor* (2004, 2009, 2010) from the Canadian Fitness and Lifestyle Research Institute (CFLRI) draws data from the Canadian Community Health Survey (data from 2002-3 and 2007-8 respectively). Only 24 per cent of Canadian adults were classified as active (walked an accumulated one hour per day), which equaled the 2003 standard for health (Public Health Agency of Canada, 2003). This figure remained the same in the 2008 report (CFLRI, 2008). Among 15 to 19-year-olds, 21 per cent engaged in adequate activity. Similarly, only 21 per cent
of 12- to 15-year olds were active enough for optimal growth and development (CFLRI, 2000) by 2000-2009 standards, and girls were half as likely as boys to be active (Armstrong, 2004). New standards were introduced in 2011 and recent reporting from Statistics Canada (2015) states that 13 percent of boys aged 5 to 17 years, and 6 percent of girls 5 to 17 years engaged in adequate physical activity by 2011 standards. By modest older standards, over 50 per cent of Ontarians are not participating in enough activity for optimal health (CFLRI, 2000 & 2009). Irving, Adlaf, Allison, Paglia, Dwyer & Goodman (2003) studied students in grade seven to thirteen over four years and observed no variance between demographic groups but a drop in activity among girls in grade eleven. Some of these statistics have shown minor improvements in participation amounts over time and slightly narrower gender gaps in developed countries and among cultural groups with less traditional gender roles for girls and boys. Nevertheless, over half of Canadians were reported to have engaged in little or no activity in the CFLRI 2005 Sport Monitor, and 73 per cent of 5- to 19-year-old Canadians were found in a step test to accumulate insufficient daily steps. Girls at age 12 to 17 were the least likely to reach current adequate standards at only three per cent (Statistics Canada, 2015). The most active group was boys aged 5 to 11 at 18 per cent (Statistics Canada, 2015).

The phenomenon of decline has been well established by researchers who observe the decline in physical activity rates between childhood and adulthood or early adolescence and late adolescence (Allison, Adlaf, Dwyer, Lysy & Irving, 2007; Anderssen, Wold & Torsheim, 2005; Armstrong, 2004; Brodersen, Steptoe, Boniface & Wadle, 2007; Brown, 1985; Le Masurier, 2004; Matton, Thomis, Wijndaele, Duvigneaud, Beunen, Claessens, Vanreusel, Phillippaerts, & Lefevre, 2006; Nelson, Gordon-Larsen, Adair, and Popkin, 2005). There is consistent recognition in the literature of a general decline by both girls and boys over the adolescent years
with more attrition by girls and a noticeable acceleration in mid-adolescence (Allison, Adlaf, Dwyer, Lysy & Irving, 2007; Kin-Isler, Asci, Altinatas & Guven-Karahan, 2009; Lunn, 2010). Before the age of 15 there is more physical activity and the gender gap in participation rates is not as clearly defined as it becomes by mid-adolescence (age fifteen and over) (CFLRI, 2004).

One of the benefits of physical activity, prevention of osteoporosis, has a specific relationship to early adolescence. The two years preceding the adolescent growth spurt are those in which 25 per cent of adult bone mineral density is built. This period is age 11 to 13 in girls and 12 to 14 in boys (Miles, 2007). To obtain healthy bone during these years 10 to 20 minutes of bone building activities (impact and resistance activities such as running and jumping) must be included in the physical activity regime a minimum of three times a week. “Peak Bone Mass (PBM) is higher in children who participate in sports that have high impact forces such as gymnastics or football…. Puberty is an important time period during which the effects of physical activity can maximize PBM” (Miles, 2007, p. 347). Childhood and adolescent activity matter a great deal in influencing healthy growth and development and lifelong patterns, and are rightly the target of research, interventions and programming.

**Data to Complete the Picture**

Much of the literature is comprised of studies that utilize quantitative methodology, or if interviews were conducted, they were usually brief telephone surveys of large numbers of participants. These have generated good profiling data of large populations. The heart of the matter - why people do not exercise - is still not fully understood. There is a void in the literature of qualitative, depth-oriented studies that aim to gain a thorough understanding of the participants’ experiences of physical activity from their perspective and within the context of their own lives. The existing studies delineating what people do have not achieved this. Much of
the work is from a behavioural sciences framework and few studies utilize qualitative methods, let alone holistic, narrative or ethnographic methods.

The early adolescent age group is of particular interest as childhood activity rates are lower than they were a decade ago and over adolescence the rates drop further. At the cusp of adolescence the participants can comment on their former child activities and their newly transcended/changed activities before they enter the rigours of high school life. Qualitative, in-depth research into the actual lived experiences of physical activity in all aspects of early adolescent lives is required.

**Assumptions and Concepts**

The purpose of this study is to advance the understanding of factors that encourage and factors that discourage participation in physical activities among early adolescents with an eye to enhancing study and promotion of lifelong participation. This work will advance the study of participation in physical activity (PPA). Furthermore, the sociology of childhood framework will be extended into physical activity and application with an early adolescent age group while enriching PPA studies by the addition of a holistic, multi-dimensional qualitative study.

The primary assumption of this study is that health and well-being are important. Those in roles of authority over others or over resources that could provide improved health or well-being for others have a responsibility and obligation to provide support toward well-being. The era and place in which we live includes work lives and leisure lives that seem to discourage, more than encourage, physical fitness and well-being. It is theoretically possible for each person to be fit. At a practical level this proves nearly impossible. The reason for the disjuncture is the broad area of my research.
For the purpose of this study and in the research to be cited, physical activity participation, exercise and activity all refer to the engagement of an individual in something that moves their body in a healthful way for a sustained period. The activity may include sports, dance, walking, other leisure pursuits or non-motorized transportation. Inactivity and sedentaryism refer to the lack of such engagement and a lifestyle that is devoid of enough movement to qualify as exercise or adequate exercise. Early adolescence refers to the first part of adolescence, in general approximately ages 12 to 15, and with reference to the study participants, 13 to 14-year-olds specifically. The participants in this study are referred to as adolescents, early adolescents, participants, students, youth, young people and children.

Rationale and Personal Interest for the Study

Logically, physical activity, fitness and a healthy mind-body connection should be accessible to, and enjoyed by, all. The economic, health, well-being, social and physical benefits could benefit each individual, community and society as a whole. In a society that includes public health and education as part of its national mandate and public concern, fitness remains elusive to the majority of the population. This contradiction is an issue requiring further attention and social change.

My interest in the field is rooted in the experience of positive physical activity participation coupled with a joy in seeing and supporting others thrive in learning, growing and healthful activities. I was raised in a home in which activity was inherent to our notions of living, working and leisure. Attending to nutrition and fitness, among other things, was a value and a behaviour that was modeled, taught and supported through communication, integrated active living including active commuting, a range of specific sports and outdoor pursuits, and as a pleasurable duty to one’s self and one’s responsibility to one’s health. It was often part of family
or community time and especially connected to a value of being outdoors. I was fortunate and benefited from these influences. I also found particular connection to dance as well as sport. I continue to practice those lessons and have had the pleasure of weaving physical and health education into segments of my career. I also simultaneously experience the realities of the mechanized work-focused life that does not make physical activity an easy or natural logistical part of most people’s days. Fortunately I have not lost sight of the priority, or practice, participation in physical activity must be granted and have made choices and retained options that have facilitated active living.

The purpose of this work is to contribute toward social change and a greater shared experience of physical activity. The study addresses the problem of persistent lack of engagement in activities and population inactivity through unpacking the problem and rigorously investigating a key link to the solutions. This research will contribute to knowledge and efforts to improve physical activity rates and experience and raise recognition of children as valuable commentators of their own experience.

Is it possible for the populations at large to participate in, appreciate, gain skill within, enjoy, benefit from, and engage and sustain participation in physical activities? The task remains to discover the most effective elements to positive physical activity experiences. I have chosen to begin with “pubescents” – those older children/early adolescents who are departing spontaneous schoolyard play for the new world of high school adolescence. In 1996 I conducted a mixed methods in-depth study of 36 middle school students in a Toronto middle school to understand their use of time and their participation in or non-participation in physical activities (see Graham, 1996). I observed them in classes, asked them to fill out questionnaires about how they spent their out of class time, and conducted focus groups and individual interviews. As they
learned the study was about physical activity participation in light of mid- to late-adolescent attrition, I asked the participants themselves what they thought the cause of decline might be. The students were keen participants and the research identified clear factors that encouraged or discouraged their participation. The students also experienced marked differences in their experience as a girl or a boy in PPA in school and community settings.

This doctoral dissertation study revisits the same school 11 years later and compares results. The research in the field had changed in light of sharply increased awareness and concern over childhood obesity; the notions of barriers and gender differences had been incorporated into newer studies; and children were thought to be doing less activity overall, involved in a large amount of screen time, heavily programmed in their out of school time, and “helicopter” parented – a term used to refer to near constant surveillance of children by parents and intense involvement in children’s programs and performance. The gender division in rates of participation and the drop in PPA over adolescence had persisted. The questions around encouraging participation in activity remained and the urgency to solving it had increased. The 2007 fieldwork resulted in some surprising findings and took my understanding of early adolescent PPA in a new direction.

This study embraces democratic principles applied in research through a sociology of childhood and feminist theoretical framework to be discussed in the next chapter. The methodological approach aligns with these principles through active listening to participants’ viewpoints alongside the collection of information on their activities, habits, choices and insights. I propose that the theory, method and analysis are part of a democratic approach seeking to model, employ and recommend equitable practices, respect for children and the maximization of access and joy on physical activity participation.
Research Questions

The following two questions are the core of the study:

- How is physical activity experienced in the lives of these early adolescents?
- What can this experience tell us about keys to participation, or lack of participation, in physical activities?

Sub-questions are:

- What are the physical activity patterns of the participants (early adolescent girls and boys)?
- What role do the participants’ parents, families and friends, school, local community centre, structured and informal spaces play in the participants’ likelihood of participating?
- Where is the locus of control and how is agency at play?
- What can be learned from the results to inform research, policy and programming to encourage meaningful participation by early adolescents and engagement in behaviours, skills and activities that are most likely to be sustained or transfer to sustainable behaviours over the life course?

I argue that these questions are best investigated using a mixed methods approach with emphasis on qualitative techniques to explore the subjective experiences of the participants’ PPA.

…education means the enterprise of supplying the conditions which insure growth, or adequacy of life, irrespective of age. We first look with impatience upon immaturity, regarding it as something to be got over as rapidly as possible. Then the adult formed by such educative methods looks back with impatient regret upon childhood and youth as a scene of lost opportunities and wasted powers. This ironical situation will endure till it is recognized that living has its own intrinsic quality and that the business of education is with that quality. (Dewey, 1916, p. 51)
In applying a sociology of childhood approach to the work this study offers a unique approach to understanding influences on and experiences of physical activity among early adolescents. Chapter two discusses the theories behind this work, feminist theory and the sociology of childhood, and the methods used in my study. Chapter three is a literature review of work documenting and exploring participation in physical activity from several disciplinary approaches including sociological, behavioural sciences and urban studies. Chapters four through seven are the results and discussion from the project. Chapter four describes quantitatively what the participants were doing with their time, when they were active, to what degree and the activities they did. What they did is followed by why they did it in Chapter five in which influences on their activities and experiences are described as well as how they felt about their participation.

The participants were forthcoming, analytical, opinionated and expressive. The study looked at their out-of-school use of time and physical activity experiences and, at the outset, was not intended to be about in-school activities, prescribed time in PHE class, for example. The participants were bursting with commentary on their in-school physical activity experiences and so Chapter six is dedicated to their experiences of physical activity in their school physical and health education classes and Chapter seven is about their in-class daily physical activity (DPA) time. DPA was a newly mandated 20-minutes-per-day of physical activity for grade one to grade eight students. The dissertation concludes in Chapter eight with reflections on the project, the theoretical approach, and implications and recommendations for research, programming, education and understanding of children and youth and their experiences, insights and physical activity. These children have the keys to what “we” as adults, researchers, practitioners and decision makers need most to know: how they experience their environment, what they already
know and do, what they think about it, and what could be different for a more active, more accessible, more equitable future. They offer what we seek. We need only listen.
Chapter 2: Theory and Method

This chapter reviews the theoretical approaches that informed this study and the methods used to conduct the fieldwork.

Theoretical Framework

The experience of physical activity is multi-faceted, and a comprehensive approach, including qualitative inquiry, is required to understand the role and experience of physical activity among young people. A theoretical framework that acknowledges power structures, agency, strata and gender, and listens to and employs the voices of the participants as authorities on their own experience, is called for. The democratic frameworks of feminist theory and sociology of childhood emphasize the importance of hearing participants speak from their own standpoint. Feminist theory addresses problems of gender access and inequity and sociology of childhood offers a perspective that acknowledges children as active knowers of their own experiences and lives.

Despite the brevity of their lives, children have much to say not only about their pasts but also about the plans and ideas they have for the future. In these accounts children position themselves as active agents in the making of their own histories…Such work offers, then, a counterpoise to the determinism of the developmental project which for many, if not all, children works as a strong structuring factor on the ways adults – teachers, practitioners and parents – understand and subsequently endeavour to order their lives for them. (James, 2005, p. 264)

The foundation of the philosophical approach for this thesis is congruent with the values and principles of democracy and the rights of each individual, the importance of physical activity for all, and the necessity for research into human behaviour and experience that listens to participants as a source of expertise on their own lives. “A democratic society is also an
informed society. The new trends within childhood research wish to take the informed-ness seriously and exploit it on behalf of childhood and children” (Qvortup, 1996, p. 26). The juncture where agency meets structure as an area where power and change are negotiated deserves particular attention.

Sociology of childhood theory holds the participants’ own experience and understanding of that experience to be valid and important and offers a scope broad enough to embrace mixed methods, particularly with a qualitative emphasis. It is a relatively new theoretical framework that grew out of a response to the limitations of the fields that have traditionally dominated research on children and childhood (James & Prout, 1996; King, 2007). It identifies childhood as a neglected area of social science, embraces an understanding of power and equity values, and grapples with issues of agency and structure. Sociology of childhood theory is compatible with, and even extends, feminist theory by understanding children as “other”, as a disempowered class, with a separate standpoint to contribute knowledge and understanding of their own experiences, meaning making and of the society they share as a whole.

Feminist theory provided the initial direction to my earlier study of participation in physical activity and gender (Graham, 1996). Participation in physical activities was more problematic for girls and women than for boys and men with girls’ attrition being more dramatic and girls reporting off-putting experiences in sport or barriers that were gender biased. Understanding that girls’ and womens’ experiences held particular challenges was key to improving sport participation. I included both the boys and the girls in my study to uphold the basis of feminists’ goal: equal opportunity and gender-sensitive study. Feminism itself is an ongoing conversation and exploration of issues related to power and gender, structure and agency, and intersections with other aspects of power and identity in society. “Feminist social theory,
like any theoretical tradition, is best seen as a continuing conversation of many voices and viewpoints (Hill Collins, 2011, para. 4).

Feminist theory also provides the underpinnings to sociology of childhood theory. It affords the implementation of more than one method. An understanding of childhood from more than one disciplinary perspective can add depth and coherence to the study (Thorne, 2007). For the area of understanding and improving physical activity participation (PPA), this thesis argues that a multi-dimensional, multi-disciplinary study with an emphasis on participant voice is essential. “Feminist sociology can provide…scholarship that is passionate, committed, and engaged in the kinds of questions people care about, using strategies that carefully build on a diversity of skills and standpoints” (Sprague & Zimmerman, 1993, p. 276). The following is a discussion of the key aspects drawn from these theoretical approaches for the purposes of this study. Democracy, equity and the betterment of all are at the foundation of both theories.

**Sociology of childhood theory.** Sociology of childhood theory is a relatively new approach offering fresh insight into the world of children. It argues for understanding childhood as an element of society that has been under-recognized, under-served by research and disempowered by theoretical perspectives.

A common core of features defining the ‘sociology of childhood’ can be distilled: that childhood should be studied in its own right; that children should be the units of observation; that children themselves should talk about their own experiences; that childhood should be seen as a part of social structure; that children should be studied in the present and not only in relation to their future as adults; that childhood be seen in an intergenerational context. (Qvortup, 1996, p 25)

In contrast to those established views of childhood or ‘the child’ that provide a valuable function but do not offer a comprehensive understanding of children’s lives, the sociology of childhood offers an extended view. Traditionally the study of the child has been dominated by
medical and developmental psychological disciplines, sociological discussions of socialization, and the examination of the child within the family (Corsaro, 2005; Mayall, 2001). Specific phases of childhood were identified by the greats of developmental psychology such as Piaget, Freud and Erickson, which proved useful in perceiving, recognizing and tracking children’s common patterns of growth and development. The drawback to this approach, and the reason for its subsequent critical analysis, is that those norms created restricted notions of childhood and did not account for temporal, geographical, cultural or individual elements to childhood. This thesis will not debate the relevance or merit of those arguments; rather, it will take the notion of childhood and adolescent development as an important sequential linear concept, and add to it that the lives of individuals occur in social, ecological, cultural, geographical, political and historical contexts. Traditional, dominant paradigms of childhood are criticized (e.g., Mayall, 2001) for leaving children’s own competence about themselves out of the knowledge of and understanding about childhood. This dissertation will embrace the notion that children, and early adolescents, can, do and will, if engaged and heard, make meaningful, relevant, contributions to the understanding of childhood.

In traditional sociological approaches to childhood, the area of child socialization was the major area of discussion. Children were seen as passive recipients who would absorb cultural norms and through which culture itself would be preserved and replicated from one generation to the next. Likewise, education was to fill up the child to bring them to a level of adult-ready competence. Again, this theory is useful in understanding child acculturation but is limited by an adult-centric perspective. “…[a] framework should embrace children’s experiences as both subjective and as the recipients of other peoples’ socializing through the institutions of family, school, and the state” (James & Prout, 1995, pp. 81-2).
The third major area in the study of childhood and the child was the study of children within the context of family. Again, notions of norms, and alertness to things gone awry, dominated the discussions. Much good was done in this context and a knowledge of child abuse, its forms and its unacceptability, was advanced through this work. The critics of the limitations of this field point out that, as with the developmental, linear model, the child is seen as a single being, static and uniform and is studied from an expert eye on the outside of childhood, the outside of family. It is a clinical approach wherein the power to understand childhood lies outside children. The prospect of any change in the world in which childhood takes place is assumed to be decided, controlled and dictated from those not within childhood. To rebalance this set of assumptions a new approach, the sociology of childhood, as a theory, a field and a multi-disciplinary community in the social sciences literature, began.

The theory has been used to frame discussion of the responsibilities of child welfare and well-being, child rights, the role and appropriateness of paternalism, child culture, children as having a minority status, child influence over culture and comparisons of children across cultures (see Mayall, 2002, and Mayall, 2013). Berry Mayall, a key theorist and researcher in the field, cites feminist theoretical approaches as the foundation piece to her development, understanding and practice of sociology of childhood. Feminism and the sociology of childhood provide a complementary dual framework in my study. The gender disparity in PPA, which was profound historically, can be understood by looking at divisions of power and at agency and empowerment and by seeing human rights as belonging to all equally, and at problems of power often residing in social constructs.

The sociology of childhood theory takes careful note, and contains considerable debate, on the power position of children. Children are economically and legally dependent and adults
are ultimately responsible but children are also actors, and adults need to be wary of being over
controlling, as opposed to responsible providing (Qvortrup, 1997). Sociology of childhood
theorists wrestle with where boundaries of paternalism, responsibility and influence lie (see
Brannen, & O’Brien, 1996; Qvortrup, 1997). They all, however, focus on the child as actor (see
Brannen & O’Brien, 1996; Brooks & Magnusson, 2006; James & Prout, 1995; King, 2007;
Mayall, 2002; Qvortrup, 1997). The intersection of agency and structure is a particularly
interesting juncture of forces of power and critical to this thesis. The research design for this
study is rooted in a belief that both structure and agency play important roles in PPA and that the
influences of both need to be understood and listened for.

Sociology of childhood theorists all use, but to greatly varying degrees, the notion that
children can be agents of their own lives and social environments. At one end of the spectrum
theorists might argue that children influence culture and not the other way around and are
themselves creating culture – not just child culture but the actual fibres of the culture in which
they live that is shared by all ages. Post-structuralist scholars will sometimes focus exclusively
on agency as the only location of power and disregard the role or influence of structure,
regarding structure as part of the agency of others (Crossley, 2004). Most sociology of childhood
theorists do not take their regard of agency to this extreme and the vast majority of theorists’
application and understanding of the sociology of childhood see children as active agents and,
simultaneously, the structures in their lives as real and important forces. This balanced regard for
the role of both structure and agency is critical to the use of the theory in this thesis.

Berry Mayall’s sociology of childhood aims to capture, create and celebrate a child
standpoint (Mayall, 2002), and to the extent that it is possible as a non-child researcher, to gather
and express the viewpoint of the children themselves. They are seen as valid communicators of
their own experience. Within my study they may also hold some of the key ingredients to understanding their experience of participation in physical activities and to the problem of non-participation. They are the experts on themselves. Mayall discusses an effort of “‘looking up’” rather than looking down. This notion she builds from Dorothy Smith’s writing on feminist standpoint theory (see, for example, Smith & Collins, 2002; and Crasnow, 2006). It is imperative to give the participants, the population of concern, as much speaking as possible. In this way, and in the fundamental effort to create a more equal power distribution, the sociology of childhood theory harmonizes with a feminist perspective.

**Feminist theory.** Feminist work examines the lives of women (and sometimes men, or both) from the perspective that women and men have different experiences and that usually women are in positions of less power than men in the public and the private world. Feminist theory at its base examines gender as a site of power and contention over power. Feminism benefited from understanding gender lines as class lines had been understood by Marxist and critical theorists. Power can be held by certain groups and used to uphold the divisions of power and privilege, freedom and choice, identity and occupation. A feminist understanding of gender and PPA formed the beginning of this study. Girls participate in less physical activity than boys and this difference can be argued to be part of residual influences of patriarchy. Great strides have been made for girls in organized sport but gender differences in overall physical activity and sport persist and widen over the life course. The majority of the research on gender differences in PPA focuses on girls as they lag behind boys’ participation levels, endure stereotyping and face specific barriers to PPA such as limited access, “chilly” (unwelcoming) climates (e.g., Lenskyj, 1995), coaching biases, etc. In my 1996 study both girls’ and boys’ experiences were examined with the awareness that girls were losing out, but that boys’
experiences and PPA were important to study concurrently. The results included some surprising notions of gender appropriate activities and changing notions of gender among the participants. A feminist analysis of both boys’ and girls’ experiences is employed in this dissertation study.

Feminist contributions to sport sociology typically focus on the limitations of institutional traditions that prohibit equal participation in sports such as inequitable ice time for hockey. Liberal feminism looks at structures and at the creation of modifications in structures to create equal opportunities (Hargreaves, 2004; Thompson, 2002). Radical feminists looked to changing the structures themselves – both institutional structures and the very notions of gender, norms and preferences (Acker, 1994; Lenskyj, 2008; Thompson, 2002). So liberal feminism called for offering both girls’ and boys’ rugby leagues with equal field time, and radical feminists pointed out that the field time for girls is being offered at inappropriate hours for girls’ safety, or that culture of the sport is inhospitable to girls, or that the components of rugby, or of competitive contact team sport in general, need to be called into question and may not be appropriate for girls, or boys, for that matter. Liberal approaches open up doors to women to mirror those of men, radical feminism looks at the meaning of the doors and whether or not a mirrored offering will bring practical, feasible or even desirable results (see for example Hargreaves, 2004 or Lenskyj, 2008). Both systems of analysis aim to improve the availability of choice, freedom, power and experience for girls, and if applied to boys as well, for boys. More contemporary feminist and gender studies approaches continued discussions on notions of gender and gender fluidity, sexuality and sport, power and opportunity. The conversations are dynamic, complex and inconclusive but examine the role of individual agency, identity and acceptance.

This thesis is in agreement with liberal feminist sport sociological contributions to the literature and credits feminist work with identifying formerly hidden barriers. Some questions
raised by more radical feminist positions are important to note as well since formerly hidden barriers such as “chilly climate” (Lenskyj, 1995) or the reality for girls when out running in public places, for example, are important to addressing the question of equity in accessibility. The fieldwork in this study was designed to listen for the participants’ views of gender and sport and activity and their own notions of what was available, appropriate and feasible. This approach embraces the same spirit as the sociology of childhood.

Sociology of childhood theory utilizes feminist understandings of women as a group or class of “other” relative to the group in a position of greater power (men) by applying the framework to children as a group or class of “other” relative to the group (adults) in a position of greater power (see Alanen, 1992; Mayall, 2002). As “other”, both women in patriarchal societies and children in adult-centric societies are often silenced, while the centre point for norms is that of the dominant group. The term standpoint was utilized by Dorothy Smith and others to counterbalance the patriarchal standpoint as the only viewpoint and axis of creation of knowledge (Smith & Collins, 2002). Recognition that there may be different centre points for norms for different groups or individuals, and recognizing that different groups or individuals have equal rights to their own standpoint, perspective and knowledge is part of an equity approach to knowledge and study of the social world. Sociology of childhood aims to hear, listen and make known the voice of children, as authorities on their own experience, having valid perspectives on the world they know, and offering views that may not be seen or held by adults. “…to make plausible the idea of letting children speak for themselves…” (Qvortup, 1997, p. 86). It aims to right a wrong by correcting the existing “…invisibility of children’s perspective and voices… (by) taking children’s accounts seriously” (Brannen & O’Brien, 1996, p.1). This standpoint is missing in the existing PPA literature.
Theory Into Method

**Theoretical approaches to methodological inquiry.** Theory and method are inextricably linked and decisions around method occur within the frameworks of theory. The methods and instruments for this study were selected to best explore the study research questions. They are situated in the theoretical framework of sociology of childhood and feminist inquiry and sensibility. They were drawn from a broad range of sociological techniques – each of which has grown out of theoretical and methodological approaches over the history of sociological inquiry. Social sciences inquiry now falls along a broad spectrum of research design and instrumentation options. This study utilizes a small contribution from post-positivistic design and a large contribution from qualitative method.

Positivistic methods are scientific designs aimed at creating quantifiably measurable results and as objective conclusions as possible. Positivistic thinking – that there is a single, objective truth – has been subjected to ruthless criticism (Bruce & Greendorfer, 1994), and dismissal, by post-structuralists arguing that knowledge is subjective and that all research, including empirical and scientific, is subjective by virtue of the fact the scientists themselves are humans, inevitably biased, and create the very (biased) questions upon which the scientific study is based and that the design, analysis and conclusions will all be contaminated by researcher subjectivity and that therefore there is no single truth (e.g., Denzin & Lincoln, 2003; Sprague & Zimmerman, 1993). Post-structuralist debate has much to offer but taken to an extreme the post-structuralist approach risks abandoning techniques that have provided very real, useful and effective scientific and social scientific data. Positivistic techniques have generated extensive value and provide the only means we have to achieve consistency and the necessary quantifiable
consistent data for replication and scientific safety (medicines, bridges, etc.). There is much to be leveraged that is of use.

Some feminist researchers even maintain that objectivity is, in principle, impossible to achieve, and that the most we can do is to admit to an unabashed subjectivity…however, the logical consequence of such a principled stance is that research, including the implied cumulative knowledge it generates, is impossible. This seems rather like throwing out the baby with the bathwater. (Eichler, 2004 p. 51)

The quantitative elements of this study fall within post-positivism in which positivist techniques are seen as essential and valuable but the possibility of human bias is not entirely dismissed and participant knowledge is given value. Basic quantitative amounts of physical activity are considered in the literature and the fields as part of the aim to establish an idea of enough physical activity and enough fitness for human health and to see with what the participants themselves were engaged. Children’s lives are highly structured via the school timetable and it is beneficial to look at their lived experiences within and around this reality. “The two pillars of science are logic and observation” (Babbie, 2008, p. 12).

Structuralist thinking also has a place in this study. Structuralist theoretical approaches see social constructs, structures and institutions as the powerful influencers over human behaviour, experience and opportunity. Socioeconomic class, the family, workplace institutions, the law, schooling etc. all contribute to identity, perception, individual choice, and power to make change. During the past twenty years, much scholarly work has dismissed much of this in favour of focusing on individuals as actors who have choice and power over their own lives – agency. The theoretical approach of this study does uphold the structuralist position that power can lay within the institutions individuals have created; institutional culture, practice and power can outlast the individuals who flow through them. Classifications such as class, race and gender carry real meaning. This study does not dismiss the reality of the power that structure holds.
Early adolescents exist within families, schools, clubs, communities and peer groups that generate power and control that are more than the sum of their parts (the individual agents). So while individual agency is acknowledged and respected, listened for and encouraged, it is deemed unfair to dismiss the weight these institutions have on the lives of children and adolescents. They carry opportunity, consequences, and labeling and while they are not beyond being influenced, they definitely do influence.

Action/interaction is not confined to individuals per se; rather it can be carried out by nations, organizations, and social worlds, albeit by the individuals within these who are representing the nation, organizations, and social worlds. Furthermore, actions/interactions carried out by nations, organizations, and so on can be directed at, or have an impact on, individuals, other nations, and other organizations and visa versa. (Strauss & Corbin, 1998, p. 185)

Where individual agency meets larger structure is a place of meaning, poignancy and potentially the terrain of change. It is the place where power between the two is negotiated, tried, pushed and pulled. This is the place in which feminism can look at the relationship between the personal and the political, the place where sociology of childhood can examine the limits and the open possibilities for children and childhood and where, especially through young people, the very nature of this can be further understood.

A more satisfactory theoretical perspective would be one that could account for childhood as a structural feature of society in the moment of its impinging upon children’s experiences in daily life and the reshaping of the institution of childhood by children through their day to day activities. In essence, it would address both structure and agency in the same movement. (James & Prout, 1995, p. 81)

A review of the areas of theory from which this research design was drawn will help to contextualize the methods of choice and their operationalization of sociology of childhood.

Sociology of childhood employs ethnography more than other methods. It is an excellent method by which to discover children’s lived experiences and to see into unexpected patterns of
behaviour, power and cultural nuance. It is also challenging to conduct at a practical level. One cannot quite be an unobtrusive “participant observer” as an adult among children and researchers need to gain permission for entrance into children’s environments, including during instructional time which can be at odds with instructional staff’s goals or preferences. A focus on the participants’ own voices can be achieved by numerous additional methods including narrative, journaling, video recording and also through traditional qualitative methods of group interviews or focus groups and individual interviews that include some open-ended questions and time for the participants to share their thoughts. This dissertation study used focus groups and individual interview methods, along with structured surveys, to give voice and time and to listen to the participants and capture a “looking up” standpoint wherever possible.

It is important to note that sociology of childhood researchers have given extensive consideration to the role, understanding, analysis and interpretation of children’s “voice” in research (see, for example, James, 2007 and Spyrou, 2011). Amidst the efforts to recognize children as a disempowered, ignored or silenced group in sociological studies and even in child studies in which the researchers observe, analyze and talk about children and instead include recognition of their agency and their capacity to comment on their own experiences, there is also caution against over romanticisation of children’s voice as the truth, or the only truth, and a call for recognizing that children when speaking for themselves, may not be well understood by adult researchers who are hearing through adult ears with adult societal filters. Much effort has been made to both broaden the net to capture child voice through use of visual, play and other means of communication and expression by the child participants (e.g. Farmer & Cepin, 2015, see also Barley & Bath, 2014), through to efforts to dilute the adult-researcher / child-participant power imbalance, by having child participants become active researchers, interviewers and analysts of
the data themselves (e.g. Farmer & Cepin, 2015; Milstein, 2010). “The use of enabling methods and multiple methods in research with children and youth is shown to offer some disruption to the reproduction, in research and in practice, of the adult perspective being imposed on children’s lived experiences” (Farmer & Cepin, 2015 p. 3 in manuscript). In the end, no single approach or medium for encouraging, showcasing or interpreting voice is deemed the single right one or the best combination. An effort to hear children, and recognize the untidy complexity of the reality of research with an attitude and approach of respect, is a generally held intention. This, and the acceptance that the researcher is ultimately accountable for the study, the data, the analysis, and the resulting conclusions and reports combine to make sociology of childhood work both ambitious and realistic in its efforts to advance the understanding, power and role of children in society and in the research processes that powers the effort.

The field of sociology of childhood is still forming and growing and has had limited work with a quantitative/qualitative mixed method approach. My study extends the application of the theory through method. Furthermore, the sociology of childhood framework has been used, to my knowledge, only in one instance for adolescence as well as study of PPA - a study by Brooks and Magnusson (2006) that did both for a small sample of adolescent girls. My study employs a sociology of childhood approach to early adolescent girls and boys and the study of participation in physical activities. This approach is new for the field of PPA and for sociology of childhood.

Most of the sociology of childhood research does not specify the age of childhood (though Corsaro identifies ages 7 to 13 as “preadolescence” [Corsaro, 2005, p. 191]). The teen years are generally a widely held, if vague, end to chronologically and socially defined childhood. The early adolescent/puberty aged/pubescent child is at a critical transition point into full teen adolescence yet is close to their childhood self as well. This age group was chosen as holding the
potential to reveal the critical PPA transition at adolescence and the ensuing withdrawal from activities. The sociology of childhood approach is equally useful for children just over and just under twelve. It is highly suited to study of PPA because of its multi-disciplinary functionality, its holistic approach, and the missing information in understanding and improving PPA. This study will expand the recorded use of the theory, and the area of PPA will be expanded through the application of the sociology of childhood approach. The goals of a democratic position, feminist inclusive understanding, sociology of childhood, a balanced view of the roles of agency and structure, mixed methods and multi-disciplinary thinking are employed with rigour in this thesis.

Sociology of childhood in the field. Sociology of childhood research studies apply the theoretical position and argument that children deserve recognition as a category of social study in their own right and that their position and knowledge of themselves is valid. Ethnographic, qualitative and some quantitative methods have been used though the foundation studies in the field have drawn mainly from anthropological traditions of ethnographic field studies. As with some discussion on the debates and discussions on what sociology of childhood is and what it should be, and on what is the child, a child, children and how should this be, discussion and debate on the role of the researcher and what it should be is alive and well in the literature. As with the discourse on theory, there is much support for simply continuing to keep the question open and considered (e.g., Jenks, 1982).

Inherent to these ventures are the questions of researcher perception, bias, contamination and interpretation; as not only are the researchers outsiders, they are also not children. And by reporting their findings as adult researchers they risk contradicting the whole purpose of a sociology of childhood approach. In grappling with the role of the researcher, James (1994)
emphasizes the importance of reflexivity in her work and places her voice “alongside the children’s”. This approach helps her manage the tricky ground that although we are not children now as adults and researchers, we once were, and thus we have our own ideas and experiences of childhood and in addition to this, as James reflects, we also have ideas of childhood from our position, if applicable, as parents of children. So we may feel we have child standpoints, but we are no longer children and we are not the children in the time and place in which we study them. To put our voices alongside theirs is to respectfully give their voice with ours included, but only next to theirs.

The studies that form the foundation of the body of research utilizing a sociology of childhood approach include, most notably, work by researchers in the U.K. and Scandinavia (e.g., Mayall, Qvortrup, Jenks, James, Prout). Here the world of children, in their own settings, is respectfully visited. The substantial earlier childhood studies on child learning, development, play and health are child-focused but are criticized by more recent scholars for carrying overt or implicit assumptions of a medicalized normal linear path for all children, a single version of “the child”, and for not including children themselves as active participants in the formulation of the content, parameters or understanding of ideas of norms of children and childhood. Child welfare experts’ opinions are also criticized for assuming an exclusively outside approach. Purveyors of child rights, within Canada, and globally, looked at many childhoods and saw that a Western ideal may not allow for full recognition of elements of childhoods from other cultures especially when those childhoods may also be in genuine strife for physical necessities. A preferred method to achieve understanding of children is to listen to what children say, think, show, see and understand about their worlds from their perspectives.
Mayall (1994) argues that setting matters in the experience of childhood and in the weighting and interplay of structure and agency. “In contemplating people in a social context, one may examine how agency and structure co-exist, interact, engage with each other to perpetuate, deconstruct and re-construct institutional and individual behaviours and norms” (Mayall, 1994 p. 117). Mayall conducted fieldwork observing five- and six-year old children and their primary relations with adults in a school setting and in their home setting. Field notes were taken and particular focus was given to factors around the children’s health care. Mayall found that setting had a highly significant impact on the degree to which agency could be exercised by the children and the extent to which the children influenced their environments, largely due to adult perception of children. The home setting afforded the children greater agency by their parents than the school setting. Children at home were seen more as individuals by their parents than they were by their schoolteachers. Parents were also more open than teachers at school to influence and contributions by their children of their understanding of children and children contributed to the creation of the family. She argues that children in fact socialize their parents and that adult receptivity to children’s input can shape adult experiences, institutions and organizations. “It is critical to recognize the power of adult constructions of the child to shape children’s experience in different settings” (Mayall, 1994, p. 125).

James, Jenks and Prout (1998) grappled with the agency/structure question and cite the limitations of a structuralist approach to childhood. They argue the merits of close ethnographic and qualitative study to understand children within their own cultural and geographic reality, and to grasp the intricacies and inconsistencies of the influence of status, wealth, gender and ethnicity at play in children’s worlds within and between each society. So structural categories are very helpful, but must be understood within each reality, and not generalized necessarily between
societies. Without overtly stating it, James et al. support ethnographic approaches and Mayall’s insight that the context of setting is crucial to understand how structure and agency each play out in children’s realities and experiences of childhood. James et al. also consider that a gap, through which observations might slip, exists between considerations of agency and considerations of structure and therefore the relationship between the two must also be observed. They advise the utilization of both “proximal” and “distal” observation and analysis, and of the “tacking” between. “This (research) involved as a necessary enterprise taking account of children’s perspectives, and indeed putting them at the centre of the analysis” (Mayall, 1994, p. 127).

James et al. (1998) overviewed several subtle variations on approaches to childhood study. They argue for the childhood focus, perspective and standpoint, and the value of qualitative methods in acquiring these aims. The importance of setting was explored and illustrated by Mayall (1994) in a study of children at home and at school in which she demonstrates “how characteristics of specific social environments…are critical in determining children’s experiences and activities” (p. 127). Setting is used in a study in Nepal by Johnson (James et al., 1998) in which they illustrate the impact of social, economic and climate changes on childhood as those children specifically experienced it. The children’s nutrition, hours available for school versus paid, versus unpaid work, were all impacted by physical, environmental and economic changes around them. The divisions of power by class, gender and ethnicity played out in specific ways within that society. The attendance of girls in school was not necessarily determined by wealth for example. In some groups girls were never sent and in others, where schooling for girls was considered culturally acceptable, girls might also not attend but be sent to work in paid labour. James et al. want us to make note that children’s lives are part of larger interconnected factors
and general policies made for children may fail to consider these subtleties and thus potentially impact children negatively when the opposite is intended.

James et al. (1998) further illustrated the importance of understanding that phenomena may occur at a very local level through the example of Frones’ 1995 study in Norway in which very rapid change in gender, educational and professional occupations occurred and traditional roles reversed in a span of twenty years. The authors highlight that whether or not the suggestion that tightly bound school cohorts (due to a change in Norwegian education) is the structural cause or not, the approach to link micro changes and macro changes is important. They go on to argue that structural analysis plus examinations with the assumption of children as social actors is still not enough. That there is risk to carrying forward a notion of a standard child and standard global notion of children and structure, structure, agency; the interrelatedness of the two and the local must all be considered. Furthermore, these environmental factors – structure at both the global and local levels, are “marked by instability and indeterminacy” (James et al., 1998, p. 142).

There is flux and change.

James et al. (1998) discuss the importance of including children’s perspectives in policy making with a responsible reference to the role of power and adult power. “Whether in the developed or the developing world (children) face the most obstacles in making their local reality felt and are the most mediated by others in the process…. How are children’s different life circumstances addressed?” (p. 145). Their position applies to all studies and policy considerations for children: improving child welfare anywhere in the world, and in understanding child experience in any setting.

The theoretical questions of what is childhood, what are children, what are they capable of, how do adult perceptions help or hurt them are intertwined with questions of research: which
methods, which assumption, which questions, which elements in their lives need to be considered. And these dilemmas link to the roles of the researcher, policy maker and professional, in determining how best to uphold a better, more open, more empowered, more authentic and healthy understanding of children and bring it into policy and practice in any setting.

Montandon and Osiek (1998) explored 11- and 12-year-old children’s understanding of factors of socialization utilizing qualitative and quantitative methods and a sociology of childhood framework to assemble the children’s point of view: “The main objective of this research was twofold: to explore the experience of children have of their own socialization and education from their point of view and to find out whether there exist distinct types of experience” (p. 250). Their mixed-method study included semi-structured interviews with open-ended questions and occasional drawings or vignettes were described to prompt discussion. Each child was interviewed once at school and once at home. Thirty-five girls and thirty-two boys participated. Quantitative data was also gathered to establish the children’s social backgrounds – though the specific nature of the questions is not described. Mantadon and Osiek’s study is more structured than many in the field of sociology of childhood inquiry. They leveraged an existing model of socialization and through their analysis grouped four types of socialization and four types of education experience. Correlations between the types indicated a direct relationship between outlooks at home and school. Children whose home experience permitted them expressivity were also likely to be curious and engaged at school and those from homes with a focus on the practical saw school as a primarily practical, instrumental endeavor. With this exception, the data more strongly demonstrated the importance of consideration of complexity in children’s environments and “configurations of (multiple) variables which constitute the
dynamics of the various situations (home, school, peer groups) they are involved in” (Montandon & Osiek, 1998 p. 261).

Empirical studies of childhood lives have a number of functions, alongside ‘straight’ theoretical debate. They can provide data that puts substance on critiques of developmental psychology and that provides positive help towards more appropriate formulation. (Mayall, 1994, p. 10)

The sociology of childhood theoretical perspective sustains, throughout the debates on what is the child, and what is childhood, a child-centered focus in which children are listened to, while child welfare, well-being, and perspective are prioritized. It is sociological and so the research looks at the holistic lives lived by children and the factors in their social environment that come to play on their experiences. Child agency, how much there is or should be or could be, in real life and in the process of research, is also a busy area of discussion and is still a common thread in the prioritization of well-being and child perspective. It is impossible to disregard the power of structures and adults when considering the experiences of children. The role and interplay of agency must always be considered with cognizance of those factors. “Through empirical work we can therefore increase our understanding of children’s structural position…” (Mayall, 1994, p. 10). The question of whether children can also influence or socialize adults, or overtly or subtly change structures, is interesting and keeping it open has allowed children to demonstrate that they can and do socialize up, given the opportunity and adult receptivity (see Mayall, 1994). Corsaro (1992) argues that children interpret adult culture and then socialize one another and do, indeed, socialize adults.

The research on children generally ends with age 12 or 13. It is clear that high school students (grade 9 to 12 in North America, and generally aged 14 to 18) are adolescents. What of the transition period: age 13, the middle school years of grade 7 and 8? This is a fascinating age with youngsters straddling the identities of childhood and adolescence. It is the focal point of
this dissertation’s investigation of the patterns and experiences of physical activity. As noted earlier, the sociology of childhood has, to my knowledge, not been employed with this age group, and only once for a related purpose (by Brooks & Magnusson, 2006). The framework embraces the principles of feminist values of equality and recognition of power in structures and its impact on groups, and it embraces the reality of agency among all individuals, while bringing forward and operationalizing democratic values through the practice of listening to, and valuing the voice of, potentially unheard, unnoticed or silenced actors. It is practical, progressive, sound social science in a useful, illuminating theoretical foundation. I employed a sociology of childhood framework to a study of grade eight students in a Toronto middle school using the quantitative and qualitative methods described below.

**Method**

A mixed-method approach was utilized to generate a multi-dimensional picture of the participants’ physical activity lives. This study follows a similar study I conducted in 1996 (Graham, 1996) and the method mirrors that work. Research questions that guided the study were presented in Chapter one - I include them here for context.

**Research questions.**

- How is physical activity experienced in the lives of these early adolescents?
- What can the experience of physical activity among these early adolescents tell us about keys to participation, or lack of participation, in physical activities?

**Sub-questions.**

- What are the students doing with their out of school time?
• What role do the participants’ parents, families and friends, school, local community centre, structures and informal spaces play in the participants’ experience of physical activity and inclination toward participation?

• Where is the perceived and observable locus of control (agency, power) and how does this interplay with PPA?

• What can be learned from these participants to inform research, policy and programming to encourage meaningful participation by early adolescents and engagement in behaviours, skills and activities that are most likely to be sustained or transfer to sustainable behaviours over the life course?

• How does the status of childhood impact physical activity experience?

• What are the results of a sociology of childhood and feminist approach to exploring these issues?

**Ethical considerations.** The project underwent the mandatory ethical review and approval processes of the University of Toronto and the Toronto District School Board. All standard ethical and confidentiality protocols were employed. Participants were given complete freedom to participate or not participate with no in-school or academic impact. It was made clear they could leave the study at any time. Data were retained in a locked cabinet. Pseudonyms were used from the first draft onward.

**Participants: population, sampling and setting.**

Purposive sampling was utilized in the 1996 study and followed in the 2007 study. Canadian middle school students residing in an urban residential area were selected as the population of interest. Toronto is one of the most multi-cultural cities in the world with 50 per cent of residents born outside Canada and over 150 languages spoken (Government of Ontario,
2013). The objective for the study sample was to find a population that was reflective of the multi-cultural, multi-income characteristics of the city. Purposive sampling generated the population sample for the 1996 study and the chosen school was representative of the Toronto District School Board demographic profile for ethnicity, socioeconomic status, years living in Canada and languages spoken at home.¹ The same school was selected for the 2007 study.

Toronto, and the Toronto School Board, amalgamated with adjacent cities in the years between the two studies. The school itself was not visibly changed but the data collection on schools in the new board had changed somewhat and the pool of data was from a much larger area. The observable differences in the school area were that real estate prices in the city had climbed significantly in this area as in all others, the students were said by staff to be slightly less academically inclined than in the previous time slot, but the mixed-income and mixed-housing of the area remained the same as did the apparent cultural make-up of the school community. The new school board shared some limited data on the school. The data indicated that the chosen school remained an excellent example of the Toronto population. The board described the school population as having 65 per cent of students who spoke a language other than English at home, compared to the board average of 46 per cent. Seventy-five per cent of the students at the school were born in Canada compared to the board’s 87 percent. The school ranked as a somewhat “challenged” school. The challenge ratings referred to a collection of demographic characteristics that indicated the chances of a school population performing well academically and on standardized tests (Toronto District School Board, 2006).

¹ The 1996 school board census report for grade 7-8 students in the school reflected the board data on population diversity. For example, 54.6% of students in the school and the school board spoke English at home and 78.2% of the students in the school and the board were born in Canada. (Statistics from the Toronto Board of Education for 1995 cited in Graham, 1996).
The school area was an urban residential neighbourhood. Toronto is considered a very “liveable” city and this neighbourhood bore the benefits of mixed purpose use so residential houses and apartment buildings were within easy reach of commercially zoned streets with stores and services. The city’s transportation system was readily available in the area. There were two public recreation community centres, several parks, playgrounds and some private leagues, clubs and facilities. The area was largely comprised of closely spaced houses with some apartment buildings. The residential roads were relatively quiet and the commercial roads quite busy. Street parking was the norm on all streets. Sidewalks were available on all streets. Pedestrian crossing was available and street connectivity was high.

The school was in a neighbourhood of mixed income and cultural diversity. I did not have access to demographic data on the individual students. Specific school information for 2007 was not available, but the school catchment area drew from two City of Toronto wards, and ward data from 2006 was available (see City of Toronto, 2015 in the bibliography). Ethical restrictions require that I do not reveal the name of the school so only general demographic information will be presented here.

In the study site school area, in both of the relevant wards, English was the primary language used in less than three-quarters of homes, which is 10 to less than 15% higher than the city average. There is some available school board data on language used at home for 2014 and just over two-thirds of the study site school population used English as the primary language at home (TDSB, 2014a) which matches the 2006 City data. One ward was within 6% of the city average for identification as a visible minority (this list included visible and cultural identity categories) and the other ward was about half the city average. Household average income was within 10% of the city average in both wards, and within $1,000 of the city median.
The TDSB Learning Outcomes Index (LOI) (TDSB, 2014b) data is available for the year 2009. The index is built from factors that have been demonstrated to influence student academic success, primarily parental education, parental income and the presence of one versus two parents (or a parent and a partner) in the home. The TDSB schools are given a rank position within the total number of all schools in the board. The study site school was above the mid-way point and below the three-quarter point on the ranking list. So in 2009, the students in the school, on average, had a slight advantage, above the board midpoint, for chances of academic achievement.

The city area information is not necessarily replicated in the study school, as people can go to different schools within the board, go to a different board (Catholic, Francophone, or Francophone Catholic) or independent schools or be home schooled. But it does demonstrate that the area from which most of the students came was diverse and reflective of the city demographics. Without details of participant demographics, we cannot be sure that the study sample is consistent with either ward data or the school board LOI, but I think it is fair to say that the students were drawn from a good example of a Toronto population.

Students in two grade eight classes were invited to participate and did so on a volunteer basis. They were informed that that I was interested in what they did with their out-of-school time and activities, rather than especially physical activity (though this was revealed toward the end of the study). The principal was supportive of this approach. The purpose of this procedure was to reduce influence on who would choose to join the study and to reduce bias in how participants answered questions.
The school population was just over 500 students. The school had a spacious field, a gym and a swimming pool. It was not a new facility, showed signs of superficial wear and the students spoke often about the pool being closed frequently for repair.

**Recruiting.** The school board’s new research department granted access to the school after the completion of the ethical review and receipt of the principal’s permission. The school office staff, students and parents supported the study. The school principal and school classroom teacher communicated with me by email and telephone before the study began. The timeframe for the study execution was restricted to a two-week period, booked toward the end of the school year. The period allowed for minimal disruption of participant academic work. The teacher and I established dates and times within the school rotational timetable in which the students could be released to participate. The teacher and I formed a good working relationship.

Before the study I came to the school to introduce the students to the project, answer questions and invite them to take home the information sheet and consent form (Appendix C) and consider participating. The students were attentive and interested and I was accepted in the room and in the school. The school was in a flux period as they were wrapping up the year and there was much excitement about finishing grade eight and the upcoming school trip and graduation party. The students were enthusiastic about the study but some who expressed a desire to participate had difficulty remembering to bring in their consent forms (Appendix C). Twenty-five students, fifteen girls and ten boys, from two classes of a possible 49 students brought permission forms back and joined the study.
**Data collection.**

**Snapshot time budget.** The students had been informed that I was interested in how they spent their out of school time. The first step in the data collection was to have them fill in a “Snapshot Time Budget” (see Appendix D). They did this exercise at their desks in their classroom. Students’ lives are highly routinized on a weekly schedule. The time budget was a blank picture of a typical weekly schedule and they filled in what they did with their time before school, at lunchtime, after school and on the weekends. It also asked them how they travelled to and from school and how long that took. By having the participants tell me everything they did with their time they were not subject to an inclination to emphasize physical activity or any other aspect. The snapshot time budget worked in a similar way to a retrospective diary, but included typical and average activities rather than one individual (possibly atypical) week. The participants found this work easy and the schedule made sense to them.

**Focus groups.** The school provided small seldom-used rooms or empty classrooms for the focus groups. The teacher sent small (four to six students) mixed-gender groups of students to me. When one group returned to the classroom, the next group was sent. The homeroom teacher arranged this procedure and we carried it forward when the classes were with other teachers. At the beginning of each group’s session I explained what we were going to do and asked if there were any questions before, after their consent, turning on the recording devices. The students were asked focus group interview questions (see Appendix F) and given time to engage in any spontaneous interaction among themselves and with me on and around the questions. I took notes as well as relied upon the recordings.

**Individual interviews.** The same format was used for the individual interviews (Appendix E) with one student being sent down and when they returned to their classroom the next student
came down. The individual interview allowed the students to discuss their activities, thoughts and feelings without the presence of their peers. This approach proved useful in the first study and in the 2007 study. They often delighted in sharing their passion for an activity (physical activity or other activities) and had more time to explain their experiences.

**Final questionnaire parts I and II.** The students filled out one more questionnaire (Appendix G) at the end of the study after all the interviews had been completed. This questionnaire asked them more about their physical activity habits and thoughts. I also added a detailed table on physical activity intensity, homework and screen time. By this time, when asked if they thought the study had some particular areas of interest, they could deduce that physical activity seemed to be a main focus. We discussed this point and the problem of attrition from physical activities. They were then asked a final questionnaire question (Appendix H) in short-answer format to share their own thoughts on why young people may engage in less physical activity over adolescence. The study wrapped up with a big thank you and popsicles for the participating classes.

**Treatment of the data.**

**Snapshot time budget and questionnaires.** For the paper-based data, all “countable” answers were tallied up. Students were free to list the things they did with their time, preferred activities etc. so these were listed, often by using a short form code, and tallied. Time was counted up, for example, number of minutes per week on leisure screen time.

**Focus groups and interviews.** I transcribed the focus group and individual interviews by hand. This is a labour intensive process and allowed me to intimately revisit the participants’ responses, tones of expression and personal styles. I used my notes from the interviews to track participant names and cross-reference content. I printed the transcripts and coded them as themes
or topics came up. Sixty-eight initial codes were used. These were then organized into 23 clusters. Each cluster was given its own file of relevant data. Emergent themes became apparent (for example, that the participants expressed repeatedly and in numerous ways that they valued activity) and the organization of the data, and main arguments followed this. I found the themes repeated in the individual interviews so all the interview and focus group data were drawn upon as one unit of data. The clusters were explored and written up. The total quantity of data was very large and to remain within the scope of the dissertation, particular areas were chosen for the focus of the dissertation.

**Limitations.** There are several limitations to this study. The use of purposive sampling and the limited available information on the specific demographic features of the students in the school and in the sample, as well as the sample size (25) limited the study’s generalizability. The students’ and parents’ choice and willingness to participate and ability to return a consent form influenced recruitment. The study focus was on the participants’ reports and reflections of their subjective experiences and does not attempt to assess the participants’ observable experiences of physical activity. Access to the school was limited to the students in a study setting and did not include field observation in classrooms or PHE classes. As the study progressed it would have become apparent to the participants that physical activity was of interest and this recognition may, or may not, have influenced their answers.

The purpose of qualitative work in a case setting is to explore deeply the actions, thoughts, feelings, reflections and meaning making of the participants, and to give them a time and space in which to share their thoughts. More broad based survey work on physical activity generated good statistical profiling of Canadians and large populations, but more qualitative work is required to deepen our understanding of why people do what they do, or do not do. The two
complement one another. A participant sample such as the one in this study can generate data, insight on the sample group, and questions to ponder on the problem of attrition to add to our reflections and to consider for future study. Future work inspired by this data may include pilot intervention designs, studies that involve larger samples, studies that use statistically generated samples, qualitative or ethnographic studies on multiple sites, or larger survey-based studies that include questions generated from the thoughts shared by the participants in this study.

Conclusion

Sociology of childhood work usually favours ethnographic field study as well as other qualitative work with the premises that children can speak on their own behalf and know their own experiences, and that they are worth listening to. This study offers a further way in which to utilize sociology of childhood and to extend it to early adolescents who are often not considered children yet are not full high-school aged adolescents. It also used a sociology of childhood approach to study physical activity. This project generated substantial data from the actors themselves to inform understanding of early adolescent experience in physical activities in a range of settings, and to inform programming.
Chapter 3: Review of the Literature on Early Adolescent Participation in Physical Activity

Introduction

“Caaarrrr!!!” is the iconic call of the Canadian child, playing hockey or other games in the street, upon recognition of an incoming car, to pull their game over to the safety of the curb and to allow the car to pass and then resuming play. It is a call decreasingly known to young people today. There is less skipping in schoolyards, less bike riding through neighbourhoods and less walking as transit. Screen time, long commutes, and highly structured programming have taken up much of the contemporary family’s time in Canada and the developed world. Increasingly sedentary lifestyles have created decreasingly fit populations and it is now widely known that the majority of people in the developed world are inactive and unfit. The cost of inactivity includes health, well-being and economic tolls, and the deprivation of the joy of physical activity. Children are too inactive for optimal growth and development and low levels of participation in physical activities increase over the life course with a particular drop during adolescence. Girls are less active than boys and this gender gap widens throughout the adolescent years. The problem is worsening, is coupled with alarm over obesity rates, and has drawn increasing attention from researchers and governments. A large quantity of data profiling the activities of Canadians has been generated yet a full understanding of the problem, and a solution, have not been achieved. There is some new research into motivations and barriers to participation but more qualitative research is required to grasp the reasons and influencers of inactivity. “Little is known about why adolescents initiate or maintain physical activity patterns” (Ketteridge & Bashoff, 2008 p. 274). Childhood participation influences on later physical activity behaviours
needs more research (Massie, 2002) and overall unanswered questions on exercise behavior patterns (Nigg, 2003) make early adolescence a suitable stage to explore. The problem of non-participation in physical activity is multi-faceted and benefits from contributions from a range of academic disciplines, as there is no single answer.

Research in the field has bourgeoned over the past ten or fifteen years and it has changed from concern mainly over attrition from organized sport to broad study of Canadians’ activity choices and patterns and detailed investigations into aspects of motivation and context. Data and ideas with potential for best practices in policy and programming are being gradually generated, but the critical keys to encouraging participation remain elusive as public education, intervention efforts and some programming have not created active populations. This dissertation focuses on early adolescents and physical activity, as a less-researched but catalytic age group through which to better understand adolescent attrition and lifespan engagement. The phenomenon of low participation overall is best understood through a multi-disciplinary approach. Research studies originating from behavioural sciences, education, sociology and geography disciplines comprise perspectives to the multi-sided crystal of the problem, causes, puzzle and best ways forward for research, education, policy and programming.

The review is organized around broad perspectives or themes, some of which coincide with scholarly disciplines while some categories go beyond a single discipline in order to highlight a particular theme. A large amount of work has been done on the parameters of participation in physical activity, and that topic will be the first one taken up, in order to build a clear picture of the existing physical activity participation patterns – what people are doing and how it compares to how much activity is deemed “enough”. Adolescent activity levels are
looked at within this section on patterns of activity levels. The reasons why people do participate, or do not, are of particular interest and research in this area has grown substantially.

The next segment is focused on issues of motivation, as many studies, often with a psychological approach, consider factors that support or discourage, motivate or are barriers to participation. Here, two studies that closely sought out identifiable barriers among Canadian teens are reviewed in detail. The study I conducted in 1996 is summarized as it identified clear factors that were found to encourage or discourage participation by early adolescents.

The important role of skill is given a section of its own, followed by a compilation of studies from psychology and social-psychology that explore concepts of the “self,” such as self-esteem and self-confidence, attributes which are believed, like skill levels, to influence participation in physical activity.

The following section moves the approach away from psychology and closer to the sociology of education. Three subsections consider the role of the school curriculum, the part played by parents, and the issue of gender equality. Finally, a perspective derived from geography and urban studies is introduced which takes the focus even further towards the importance of context and the influential role of the macro physical environment on activity participation.

Life Course Participation

Participation: patterns and influences. It is important to be clear about what is understood by physical activity, participation, inactivity and sedentaryism and to settle how much activity is necessary before looking into data on how much people are doing and why. In this review physical activity participation, exercise and activity all refer to the engagement of an individual in something that moves their body in a healthful way for a sustained period. The
activity may include sports, dance, walking, other leisure pursuits or non-motorized transportation. Inactivity and sedentaryism refer to the lack of such engagement and a lifestyle that is devoid of enough movement to qualify as exercise or adequate exercise to maintain basic health. In the following sections, literature is reviewed on the benefits of physical activity, its decline over the lifespan, the extent to which early patterns influence later ones, the question of how much physical activity is “enough” and adolescent activity and intensity levels.

**Benefits of physical activity.** Participation in physical activities brings reduced illness, expense, increased joy and personal well-being as well as community and society benefits. Exercise is the simplest and most effective form of preventive medicine, reducing morbidity and several chronic degenerative diseases including cardiovascular disease and obesity (Trost et al., 1996; Miles, 2007; NAPAHS, 2006; Ransdell & Wells, 1997; Sallo et al., 1997; Savage & Scott, 1998; Tremblay & Williams, 2001). Mental health, general sense of well-being, and self-esteem can also be improved (NAPAHS, 2006; Sacker & Cable, 2005). Participation in physical activities can provide people with connection to their communities and to themselves. The cost of inactivity includes an economic price – over two billion dollars in Canadian health care costs related to inactivity in 1999 and the cost of premature death (21,000 in Canada in 1995) (Katzmarzyk et al., 2000). Promoting equitable access to, and participation in, physical activities sustains the values of a progressive democracy. Some authors (e.g., Grosz, 2003; Wedgewood, 2004) also see participation in sports and the healthful use of one’s body as a way of living powerfully, challenging norms or expanding oneself. Active, healthy living bears so many attributes it warrants continued investigation and activism for the benefit of all.

**Decline over the lifespan.** There is a decline in participation rates over the lifespan. Allison et al. (2007), Anderssen et al. (2005), Armstrong (2004), Bélanger et al. (2009),
Brodersen et al. (2007), Brown (1985), CFLRI 2009, Eithsdottir et al. (2008), Le Masurier (2004), Lunn (2010), Matton et al., (2006), Miles (2007), Nelson, et al., (2005), Paprin (2005), Pfeiffer, et al., (2007), Telama, Yang, Laakso, Viikari (1997), Trost, et al., (2002) among many others all observed the decline in physical activity rates between childhood and adulthood or early adolescence and late adolescence. Every study, without exception, also found a lower level of activity among girls and women than among boys and men. This gender gap in participation levels has been consistent for several decades. It widens further as people move through the adolescent years and is exacerbated by the overall lifespan decline. A sudden drop in this decline is often also observed at mid or late adolescence (Allison et al., 2007; Kin-Isler et al., 2009; Laberge & Moreau, 1998; Lunn, 2010). The problem of decline over the lifespan is consistently observed in a range of developed countries in Europe, Britain, North America, Turkey, New Zealand, Australia, etc.

**Early life physical activity patterns influence later patterns.** A causal relationship between childhood activity levels and activity levels later in life has been established by longitudinal data. Authors (e.g., Massie, 2002; Sherman & Ruiz, 2000) once argued there was a shortage of longitudinal research or any clear data demonstrating a causal relationship between childhood activity levels and adolescent or adult activity levels, or adolescence influencing adulthood; there are now several established studies in the field. With rare exception earlier experiences and participation behaviours are found to predict and influence later ones. Massie’s 2002 study demonstrated a predictive relationship between childhood participation and adult participation. Le Masurier (2004), and Richards, Poulton, Reeder, Williams (2009) found that inactive children were likely to remain inactive over time and into adulthood. Sherman and Ruiz (2000) looked at children in grades five, six and seven and found that those who were considered
at risk for low levels of participation remained at risk two years later. Rhodes et al. (2006) claimed that the behaviour in the 9 – 11-year-old category predicts lifelong behaviour and Brodersen et al. (2007) found that trends in inactivity are largely established by the age of 11 to 12 years. Follow-up studies of 9-, 12-, 15- and 18-year olds, 9 to 12 years after an initial study by Telama et al. (1997) found that participation in competitive sport and the highest level of physical and health education completed were the best predictors of later physical activity. The intensity of the earlier physical activity was also a significant predictor.

Several large-scale long-term studies establish the lasting impact of active childhoods and adolescence. Scheerder et al. (2006) followed up participants from 1979 twenty years later and state that adolescent participation in physical activities is the single greatest predictor of adult participation. Richards, Williams, Poulton and Reeder (2007) assessed young people in New Zealand from age 7 to 21 at intervals and found that childhood participation significantly influenced later participation but that there were individual differences and times in which activity was included or dropped on or off during the time period. The authors note the statistically significant tracking but warn against seeing childhood participation alone as an “inoculation” against adult inactivity. Indeed specific experiences of physical activity also play a role. A Norwegian study (Kjonniksen, Fjortoft & Wold, 2009) of 630 young people from when they were 13 to 20 years found that participation in organized sport was a predictor of activity levels at age 23 for males, but attitude about school physical education was a more significant predictor for females. Engstrom’s (2008) study of 1,518 participants over 38 years in Sweden showed that breadth of sport participation, socioeconomic status and educational capital combined to support a strong sport habitus and exercise participation at mid-life. A New Zealand study of over 1000 youth from when they were age 3 to 18 established that childhood
participation levels definitely influenced adolescent levels but that socioeconomic levels also influenced participation (Richards et al., 2009).

It is very clear that early life influences adolescence and adult participation patterns. Childhood and adolescent activity matters a great deal and is rightly the target of research, interventions and programming. Understanding the reasons why young people continue or withdraw from activities key to supporting an increase in active lifelong living.

**Recommended amounts of physical activity – how much is enough?** The concern over inactivity and recommendations for increased activity requires a clear notion of how much activity is “enough”. There was no uniform, universally held recommended amount until in 2010 the World Health Organization issued new guidelines including 60 minutes of Moderate to Vigorous Physical Activity (MVPA) every day for 5-to 17-year olds including bone strengthening activity at least three times a week (World Health Organization, 2010). The research prior to 2010 evaluated activity levels against existing, varied, norms and recommendations. Canada’s guidelines usually stated that people needed 30 minutes of vigorous physical activity three or more days per week (Irving et al., 2003). Many other international guidelines were similar to this one (Armstrong, 2004), recommending 20 sustained minutes of MVPA three or more times a week and some daily activity for children and adolescents, or one hour per day of Moderate Physical Activity (MPA) (such as brisk walking) for young people (Armstrong, 2004). In the United States 60 minutes of activity six to seven times per week was recommended (Pratt, Macera and Blanton, 1999). In the U.K. it was deemed that 60 minutes of moderate activity was required seven days a week for children and adolescents and 30 minutes five days a week for adults (Miles, 2007). More recent recommendations are closer to the WHO 2010 recommendations and in January 2011 Canadian guidelines became 60 minutes of
accumulated MVPA daily including vigorous activity three days a week and bone building activity three days a week for children and adolescents (Tremblay et al., 2011). Physical activity is categorized as vigorous, moderate or light in much of the Canadian literature. Vigorous activity requires that the participant is sweating and breathing hard.

The inconsistency in exact amounts was sometimes due to whether the intensity of the activity levels or the habits of the category of person was used. The Canadian Fitness and Lifestyle Research Institute (CFLRI) (2000) considered Active levels of participation the accumulated engagement to the equivalent of one hour of brisk walking, or more, every day. This entails the expenditure of three or more kilocalories per kilogram (KKD) (3+ KKD). Moderately Active people receive one half hour of brisk walking, or the equivalent, every day (1.5 – 2.9 KKD) and Inactive people accumulate only one-quarter hour or less every day (< 1.5 KKD) (CFLRI, 2000). Other sources would consider actual level of fitness more relevant than amount of activity performed, yet there is even less consensus or consistency in guidelines for this attribute (Armstrong, 2004). Nevertheless, the existing descriptions and categories have enough in common that discussions about vigorous (running), moderate (brisk walking) and low (gardening) activity levels have been applied to a range of research efforts.

Many studies have assessed the quantity and intensity of people’s activity levels. Self-reporting questionnaires are the most commonly used methods. Some studies use heart monitors or accelerometers to establish the intensity and timing of activity levels. The questionnaire-based research is extensive and very large studies have been conducted in the past five to eight years. They provide a general profile of what people are doing with their time or leisure time or bodies. Few of them, however, investigate to any depth why people are doing what they do. For the purpose of this part of the chapter their somewhat superficial data is perfectly suited to sketch a
picture of general behaviors and activity levels. Each study focuses on a different age group, method and area of concern, but put together, a general picture of what people are doing is easily formed.

**Canadian participation levels.** The CFLRI (2008) reported that 48 per cent of Canadians are moderately active (by pre 2011 standards of one half hour of walking every day – 1.5 – 2.9 KKD) or more during their leisure time. Twenty-five per cent are Moderately Active and the other 23 per cent are Active (3+ KKD) and 52 per cent are Inactive (less than 1.5 KKD). Katzmarzyk et al. (2000) found that 62 per cent of Canadians were inactive thirteen years ago. Turner, Gibbons and Steel (2005) found that 18 per cent of adults were unfit. Fifty-nine per cent of Ontarians were not active enough for optimal health and a mere 21 per cent of teens are engaged in adequate activity (CFLRI, 2000). The 2011 standards increased the overall amount of activity expectations for optimal health and emphasized intensity as well as quantity. Against these standards only 7 per cent of Canadian children and youth were deemed to be engaged in adequate physical activity (Barns et al., 2012), and this number has since dropped to 5 per cent in 2015 (Participaction, 2015).

**Child and adolescent activity and intensity levels.** Few adolescents in Canada receive adequate physical activity in quantity or intensity. According to Irving et al. (2003), and earlier standards, two-thirds of Ontario adolescents received the recommended amounts of vigorous physical activity (VPA) and there was no change between 1997 and 2001. Twenty-one per cent were considered Active (3+ KKD) and boys were much more active than girls. The CFLRI (2000) found 49 per cent of 12- to 19-year-olds to be Active but only 21 per cent active enough to meet the daily physical activity level guidelines for optimal growth of 6 KKD for adolescents. Shropshire and Carroll (1998) found that not more than 30 minutes of total activity per week was
present among 21 per cent of 10- to 11-year-olds in an English study, and that only one-third of them met the minimum requirements. Thirty-six per cent of boys and 27 per cent of girls received enough activity. The Healthy Kids Canada report in 2011 found only 7 per cent of Canadian children receive 60 minutes of moderate to vigorous daily activity (Barnes, et al., 2012) and 5 per cent of teens are reported to be adequately active in The 2015 Participaction Report Card (Participaction, 2015).

There is an overall decline in activity during adolescence over time as well as over the life course. Irving et al. (2003) found that 63 per cent of adolescents received the recommended 20 minutes of VPA three or more times per week in 2001 (three per cent fewer than in 1997); however, among girls the decline was dramatic: 60 per cent in 2003 from 70 per cent in 1997. Grade 11 girls ceased activity at the most notable rate. The existing gender gap in participation coupled with the age gap exacerbated girls’ sudden inactivity (Irving et al., 2003). In the United States, Pratt et al. (1999) found a similar level of activity among adolescents. Sixty-four per cent were active enough in 1997 but only 28 per cent of adults met the MVPA recommended levels. Armstrong, Tomkinson and Ekelund (2011) found adolescent boys more active and more aerobically fit than adolescent girls, a decline in activity by both boys and girls over adolescence, and the aerobic fitness of both were 13 per cent lower over a 35-year period.

The pattern of the accumulated activity is not always considered in these studies, particularly if they are based on self-reports. When Trost et al. (2002) looked for sustained 20-minute periods of any level of PA, they found that few, if any, grade one to six students achieved this. Armstrong (2004) also found that very few young people get 20 minutes of MVPA on a daily basis and that only half of high school girls and two-thirds of high school boys actually achieve the equivalent of a ten-minute sustained brisk walk on three days or more per week.
Armstrong also found that the majority of primary school children only received 30 minutes of MPA when the total days’ activities were counted cumulatively. Boys are twice as likely as girls aged 12- to 19 to reach 6 KKD. Twenty-seven per cent of boys received 6 KKD and even more received 3 KKD. Similarly inadequate PPA levels were found in Norway (Kolle, Steene-Johannessen, Andersen & Anderssen, 2010), Iceland (Eithsdottir et al., 2008) the U.K. (Miles, 2007). Clearly, by adolescence, there are serious inactivity behaviors and patterns in place. The role of the school, especially its physical and health education (PHE) curriculum is important and will be discussed later in this chapter.

While a substantial body of literature now exists detailing the amount of activity in which people are engaged, there is less clarity in the data generated to explain reasons why people do what they do and what factors, behaviours or circumstances lead to drop-out versus adherence to an active lifestyle over time. Numerous researchers have identified factors that influence participation and non-participation. In subsequent sections we consider many of those factors, beginning with motivation.

**Motivation and Participation in Physical Activities**

**Documentation and discussion of influences.** Studies deliberately pursuing the identification of factors that motivate or discourage participation have been successful in finding a list of such influencers. The studies emphasize differing age groups, methodology and demographics and so the lists are long and they do not all utilize the same terminology. Tables 1 and 2 provide an overview of the cumulative literature from the past 15 years, on factors that encourage and factors that discourage participation in physical activity.
Table 1.

**Motivation and Positive Influences Toward Being Physically Active**

- **Encourage** -

<table>
<thead>
<tr>
<th>Motivation/Meaning of Exercise</th>
<th>References</th>
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<tbody>
<tr>
<td>Managing weight</td>
<td>Allender, Cowburn &amp; Foster, 2006 – girls and boys; Capdevila, Niñerola, &amp; Pintanel, 2004 - boys/men only; Hohepa, Schofield, &amp; Kolt, 2006; Lowry, Galuska, Fulton, Burgeson, &amp; Kann, 2005; Saxena, Borzekowski &amp; Ricker, 2002 - girls</td>
</tr>
<tr>
<td>Obtaining and “ideal body size”</td>
<td>Allender et al., 2006 - girls; Hohepa et al., 2006 - girls</td>
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<tr>
<td>Fun</td>
<td>Ingledew &amp; Sullivan, 2002</td>
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<tr>
<td>Physically related factors</td>
<td>Ingledew &amp; Sullivan, 2002; Tergerson &amp; King, 2002</td>
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<tr>
<td>Be part of a team</td>
<td>Allen, 2003; Saxena et al., 2002</td>
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<tr>
<td>Friends</td>
<td>Graham, 1996; Yungblut, 2012</td>
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<td>Family</td>
<td>Graham, 1996</td>
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<tr>
<td>Social recognition</td>
<td>Allen, 2003; Capdevila, et al., 2004; Chase &amp; Machida, 2011 – boys; Mroczkowska, 2003</td>
</tr>
<tr>
<td>Parental pressure</td>
<td>Allen, 2003</td>
</tr>
<tr>
<td>Stress control</td>
<td>Capdevila et al., 2004; Eime, Payne, Casey &amp; Harvey, 2008; McGowan, 2001; Mroczkowska, 2003 – girls</td>
</tr>
<tr>
<td>Diversion</td>
<td>Capdevila et al., 2004</td>
</tr>
<tr>
<td>Well-being</td>
<td>Capdevila et al., 2004</td>
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<tr>
<td>Competition</td>
<td>Capdevila et al., 2004; Eime et al., 2008; Freyer, 1996; Graham,</td>
</tr>
</tbody>
</table>
**Motivation and Positive Influences Toward Being Physically Active**

- **Encourage** -

<table>
<thead>
<tr>
<th><strong>Motivation</strong></th>
<th><strong>Reference</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Membership</td>
<td>Capdevila et al., 2004</td>
</tr>
<tr>
<td>Challenge</td>
<td>Capdevila et al., 2004</td>
</tr>
<tr>
<td>Agility, flexibility</td>
<td>Capdevila et al., 2004</td>
</tr>
<tr>
<td>Social among high task-oriented</td>
<td>Castillo et al., 2000</td>
</tr>
<tr>
<td>Parent who exercises</td>
<td>Eime et al., 2008; Tergerson &amp; King, 2002</td>
</tr>
<tr>
<td>Health – among high task-oriented boys</td>
<td>Castillo et al., 2000</td>
</tr>
<tr>
<td>Aspirations</td>
<td>de Rose, de Campos &amp; Tribst, 2001</td>
</tr>
<tr>
<td>Emotional necessity</td>
<td>de Rose et al., 2001</td>
</tr>
<tr>
<td>Pleasure</td>
<td>de Rose et al., 2001</td>
</tr>
<tr>
<td>Enjoyment</td>
<td>Allender et al., 2006; Bush, Laberge, &amp; Laforest, 2010; Casey et al., 2009;</td>
</tr>
<tr>
<td></td>
<td>Dudley, Okely, Pearson &amp; Peat, 2010; Eime et al., 2008; Ketteridge &amp; Boshoff,</td>
</tr>
<tr>
<td></td>
<td>2008; Miles, 2007; Whitehead &amp; Biddle, 2008</td>
</tr>
<tr>
<td>Joy</td>
<td>Mroczkowska, 2003 – girls</td>
</tr>
<tr>
<td>Fun</td>
<td>Yungblut, 2012</td>
</tr>
<tr>
<td>Increase athletic skill</td>
<td>Freyer, 1996; Graham, 1996; Sirard et al., 2006</td>
</tr>
<tr>
<td>Maintain fitness</td>
<td>Casey et al., 2009; Freyer, 1996</td>
</tr>
<tr>
<td>Social growth and relations</td>
<td>Allen, 2003; Allender et al., 2006; Eime et al., 2008; Ketteridge &amp; Boshoff,</td>
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<td></td>
<td>2008; McGowan, 2001; Saxena et al., 2002; Sirard et al., 2006</td>
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<tr>
<td>Health</td>
<td>Ketteridge &amp; Boshoff, 2008; McGowan, 2001</td>
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<tr>
<td>Motivation and Positive Influences Toward Being Physically Active</td>
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<td>---------------------------------------------------------------</td>
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<tr>
<td><strong>- Encourage -</strong></td>
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<tr>
<td>Beauty in human movement</td>
<td>McGowan, 2001</td>
</tr>
<tr>
<td>Strength</td>
<td>McGowan, 2001</td>
</tr>
<tr>
<td>PHE</td>
<td>Graham, 1996</td>
</tr>
<tr>
<td>Winning – boys</td>
<td>Mrockowska, 2003</td>
</tr>
<tr>
<td>Peers participate</td>
<td>Deflandre, Lorant, Gavarry, &amp; Falgairette, 2001; de la Haye, Robins, Mohr, &amp; Wilson, 2011; Smith, 1999</td>
</tr>
<tr>
<td>Parental logistic support</td>
<td>Eime et al., 2008</td>
</tr>
<tr>
<td>Parental support</td>
<td>Hsu et al., 2011; Mulhall, Reis, &amp; Begum, 2011</td>
</tr>
<tr>
<td>Belief in importance of PA</td>
<td>Graham, 1996; Saxena et al., 2002</td>
</tr>
<tr>
<td>Sibling involved in PA</td>
<td>Sallis, Prochaska &amp; Taylor, 2000</td>
</tr>
<tr>
<td>Perception of self</td>
<td>Deflandre et al., 2001; Sallis et al., 2000</td>
</tr>
<tr>
<td>Sport involvement of father (girls)</td>
<td>Deflandre et al., 2001</td>
</tr>
<tr>
<td>Perceive parents as active</td>
<td>Toftegaard-Stoeckel, Nielsen, Ibsen, &amp; Andersen, 2011</td>
</tr>
<tr>
<td>Private environment (girls)</td>
<td>Deflandre et al., 2001</td>
</tr>
<tr>
<td>Higher SES factors e.g., higher parental income, higher education</td>
<td>Findlay, Garner &amp; Kohen, 2009</td>
</tr>
<tr>
<td>Extraversion</td>
<td>Francis, Kelly &amp; Jones, 1998</td>
</tr>
<tr>
<td>Support from family</td>
<td>Allender et al., 2006; Hsu et al., 2011; Mulhall, et al., 2011; Tergerson &amp; King, 2002</td>
</tr>
<tr>
<td>Self-determined motivation orientation</td>
<td>Treasure &amp; Biddle, 2000</td>
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### Motivation and Positive Influences Toward Being Physically Active

<table>
<thead>
<tr>
<th>Encourage</th>
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<tbody>
<tr>
<td>Having friends to exercise with</td>
</tr>
<tr>
<td>de la Haye et al., 2011; Kirby &amp; Inchley, 2013; Tergerson &amp; King, 2002</td>
</tr>
<tr>
<td>To become strong</td>
</tr>
<tr>
<td>Tergerson &amp; King, 2002 - boys</td>
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### Table 2.

<table>
<thead>
<tr>
<th>Barriers and Negative Influences Toward Being Physically Active.</th>
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<tbody>
<tr>
<td>Discriminate</td>
</tr>
<tr>
<td>Engaged in technology related activities</td>
</tr>
<tr>
<td>Allison et al., 2005; Dwyer et al., 2006; Nigg, 2003</td>
</tr>
<tr>
<td>Lack of peer support</td>
</tr>
<tr>
<td>Hohepa et al., 2006</td>
</tr>
<tr>
<td>Low accessibility to opportunities</td>
</tr>
<tr>
<td>Hohepa et al., 2006; Stuart, 2003</td>
</tr>
<tr>
<td>Limited facilities and opportunities (urban)</td>
</tr>
<tr>
<td>Dagkas &amp; Stathi, 2007</td>
</tr>
<tr>
<td>Structure of PE classes (girls)</td>
</tr>
<tr>
<td>Dudley et al., 2010; Hohepa et al., 2006</td>
</tr>
<tr>
<td>Boys dominate PE classes (girls)</td>
</tr>
<tr>
<td>Allender et al., 2006</td>
</tr>
<tr>
<td>PHE</td>
</tr>
<tr>
<td>Graham, 1996</td>
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<tr>
<td>Distance too great to commute in an active way to school</td>
</tr>
<tr>
<td>Hohepa et al., 2006</td>
</tr>
<tr>
<td>Lower priority for PA</td>
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<td>Allison et al., 2005</td>
</tr>
<tr>
<td>Low grade in PHE</td>
</tr>
<tr>
<td>Engstrom, 2008; Tammelin, Laitinen, Rintamäki, &amp; Järvelin, 2003</td>
</tr>
<tr>
<td>Lack of time</td>
</tr>
<tr>
<td>Allison et al., 2005; Berry, Naylor &amp; Wharf-Higgins, 2005; Dwyer et al., 2006; Eime et al., 2008; Saxena et al., 2002; Sirard et al.,</td>
</tr>
</tbody>
</table>
**Barriers and Negative Influences Toward Being Physically Active.**

— Discourage —

<table>
<thead>
<tr>
<th></th>
<th>Source(s)</th>
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<tbody>
<tr>
<td>Concerns about safety</td>
<td>Tergerson &amp; King, 2002; Dwyer et al., 2006; Graham, 1996</td>
</tr>
<tr>
<td>Fear of injury</td>
<td>Graham, 1996; Metzker, 2000; Stuart, 2003</td>
</tr>
<tr>
<td>Too inconvenient</td>
<td>Metzker, 2000</td>
</tr>
<tr>
<td>Lack of motivation</td>
<td>Metzker, 2000; Robbins, Pender &amp; Kazanis, 2003; Saxena et al., 2002 - girls</td>
</tr>
<tr>
<td>Time with family</td>
<td>Metzker, 2000</td>
</tr>
<tr>
<td>Self-conscious about looks</td>
<td>Robbins et al., 2003</td>
</tr>
<tr>
<td>Lack of skill or perceived lack of skill</td>
<td>Allender et al., 2006; Barrett Morgan, van Beurden &amp; Beard, 2009; Eime et al., 2008; Metzker, 2000; Dudley et al., 2010</td>
</tr>
<tr>
<td>Inaccessibility of facilities</td>
<td>Allison et al., 2005; Dwyer et al., 2006</td>
</tr>
<tr>
<td>Cost</td>
<td>Allison et al., 2005; Dwyer et al., 2006</td>
</tr>
<tr>
<td>Influence of peers</td>
<td>Allison et al., 2005; Dwyer et al., 2006</td>
</tr>
<tr>
<td>Influence of family</td>
<td>Allison et al., 2005</td>
</tr>
<tr>
<td>Influence of teachers</td>
<td>Dudley et al., 2010; Dwyer et al., 2006</td>
</tr>
<tr>
<td>Influence of parents</td>
<td>Dwyer et al., 2006</td>
</tr>
<tr>
<td>Competition</td>
<td>Dwyer et al., 2006 ; Dudley et al., 2010</td>
</tr>
</tbody>
</table>
### Barriers and Negative Influences Toward Being Physically Active.

--- Discourage ---

<table>
<thead>
<tr>
<th>Category</th>
<th>Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Body-centred issues</td>
<td>Dwyer et al., 2006</td>
</tr>
<tr>
<td>Individual characteristics</td>
<td>Allison et al., 2005</td>
</tr>
<tr>
<td>Lack of energy (pre-adolescent)</td>
<td>Burrows, Eves &amp; Cooper, 1999; Tergerson &amp; King, 2002</td>
</tr>
<tr>
<td>Lack of enjoyment (pre-adolescent)</td>
<td>Burrows et al., 1999</td>
</tr>
<tr>
<td>Lack of interest</td>
<td>Sirard et al., 2006</td>
</tr>
<tr>
<td>Coaching problems</td>
<td>Eime et al., 2008; Sirard et al., 2006; Stuart, 2003</td>
</tr>
<tr>
<td>Not experiencing skill improvement</td>
<td>Stuart, 2003</td>
</tr>
<tr>
<td>Not enough opportunities to make friends through sport</td>
<td>Stuart, 2003</td>
</tr>
<tr>
<td>Don’t value sport</td>
<td>Stuart, 2003</td>
</tr>
<tr>
<td>Perception of self</td>
<td>Sallis et al., 2000</td>
</tr>
<tr>
<td>Show others an unfit body</td>
<td>Allender et al., 2006</td>
</tr>
<tr>
<td>Dislike PHE</td>
<td>Eime et al., 2008</td>
</tr>
<tr>
<td>Self-consciousness (girls)</td>
<td>Robbins et al., 2003</td>
</tr>
<tr>
<td>Low socioeconomic status</td>
<td>Dagkas et al., 2007; Engstrom, 2008; Findlay, Garner, &amp; Kohen, 2010; Johnston, Delva &amp; O’Malley, 2007; Lee &amp; Martinek, 2009; Lunn, 2010; Richards et al., 2009; Toftegaard-Stoeckel et al., 2011</td>
</tr>
<tr>
<td>Lack of parental support for logistics</td>
<td>Casey et al., 2009; Eime et al., 2008</td>
</tr>
<tr>
<td>Prioritize academics</td>
<td>Eime et al., 2008; Chase &amp; Machida, 2011 - girls</td>
</tr>
</tbody>
</table>
Barriers and Negative Influences Toward Being Physically Active.

– Discourage –

<table>
<thead>
<tr>
<th>Boys dominate in co-ed settings</th>
<th>Ramanathan &amp; Crocker, 2009</th>
</tr>
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<tr>
<td>PHE teachers</td>
<td>Casey et al., 2009; Dudley et al., 2010</td>
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The fact that barriers are being considered by some otherwise apolitical researchers is telling of the effectiveness of the work by more radical studies and writing that drew attention to the fact that not all people have equal access to programs and facilities even if those programs and facilities have spots open to them. For example, the local arena may have hockey for girls during daylight hours – creating equal access with boys – but in some communities girls or cultural groups may still not be able to sign up as readily as boys due to, for example, their parents’ restrictions, other responsibilities, the cost of equipment etc. Barriers as a cause for non-participation have registered in current mainstream research.

Table 2 demonstrates in a condensed package the range of perceived barriers the participants in various studies claimed to experience (or, to phrase differently: the table demonstrates the barriers to physical activity encountered by young people today). Some studies asked the participants why they do not participate but the majority had a set list of potential barriers and asked the participants to agree or disagree with them or rate them on a Likert scale. Either way, the methodological tool could be both praised for providing recognition to known obstacles and criticized for presenting leading questions. Again, because there is more than ample research to demonstrate that barriers exist, were often overlooked in earlier research, and need to be considered, their presence alone contributes adequate value. The more they are revealed and the more specificity is teased from their investigation, the more insight can be
gained into why, sometimes despite apparent opportunity, young people remain away from activities.

Most of these studies used self-reporting as part of their survey, questionnaire or questionnaire-based interviews. Self-reporting gives the study participant an opportunity to claim their own perception of their relationship to the study topic even if the instruments are closed question surveys. Interestingly, each study also expressed self-reporting as a limitation and emphasized the participants’ identified barriers to participation as perceived barriers. This is necessary as part of rigorous scientific method – no one went into the communities or participants’ daily lives to establish from an outside viewpoint whether or not the school was really too far to walk to, or if the family could not provide money for fees etc. Yet, perhaps even unintentionally, the use of the word perceived creates an undertone of a non-acceptance of the participants’ expressed experience of, and belief of, barriers as necessarily accurate or true. One could argue that any barrier – perceived or otherwise – is indeed a valid and effective barrier. Anything that interferes with ready participation is an obstruction.

Factors that motivate include fun, enjoyment, social connection and inclusion, challenge and achievement, competition and winning, fitness and skill, weight management, emotion and stress management and, among a few, recognition of the beauty of human movement or aspirations for future excellence. Physical activity participation can fulfill basic human needs for community, health and personal growth. Feminist research emphasizes the importance of what girls find attractive in sports and physical activity: social and fun aspects formerly overlooked in the literature. More recent work does include social meaning and in a small way, pleasure among the possible reasons for participation, though most of the data in the field, up until the very recent more holistic studies, is focused on the first level of inquiry and response, is survey-
based, and does not reveal deeper layers to those motivators. Some of the participants in these studies had found in their sport and physical activity participation the meeting of those basic human social and personal growth needs, and may or may not have consciously associated them with their involvement in movement and sport prior to becoming involved in a study that asked participants questions and usually provided a selection of answers. Nevertheless, they always had choices for responses and these motivating factors are part of the key to the question why some young people, do, in fact, participate in physical activities. What differentiates them and their experiences from those who do not is the next question. Some researchers, sometimes from a sociological tradition but more often psychological approach, have included sub-questions or more variables to identify more detailed factors behind motivation.

Psychological approaches take great care in reducing variables to measurable factors and executing their investigations in as scientific and replicable manner as possible. These are successful in teasing out some of the details in behavior. They do not, however, benefit from context and exclude considerations of equity, circumstance and environment. They are the opposite of holistic, multi-dimensional or ecological approaches. They often do, however, acknowledge in their findings that the motivational and behavioral factors in participation or non-participation are complex and multi-faceted. These studies assume equal choice and do not seek to address wider influences.

Two Canadian studies, Dwyer et al. (2006) and Allison et al. (2005), advanced inquiry into barriers and motivation through the use of qualitative methods in smaller more in-depth investigations of adolescents' reasons for participation in physical activities. The studies are part of a larger project involving thirteen- to eighteen-year-olds. Allison et al. (2005) conducted focus groups with twenty-six male adolescents. The study makes good use of qualitative methods
and gleans some understanding from the boys’ discussion and comments. It is successful yet despite some peculiarities it is a valuable qualitative example and warrants further examination.

Participants who answered two or fewer days per week were placed in the “inactive” category and those who answered three or more days were considered “active.” Due to limited volunteer participants the two groups were meshed and thus this differentiation did not provide a meaningful variable; it does, however, indicate how the researchers regard activity. The boys might have, for example, walked briskly for two hours a day but be deemed utterly inactive. The study design, recruiting, logistics, execution and data analysis involved many different people in a multi-staged process. From study design to administration to data management to analysis and write-up the study baton was passed repeatedly. It is possible that some of the essence of the research and participants was lost in this process and that qualitative data and ethnographic methods benefit from the researcher being on the ground and in the field from start to finish.

Allison et al.’s (2005) study makes a contribution to the literature through its use of focus groups. The authors identified “internal barriers:” individual characteristics, lower priority, engagement in technology-based activities, being too young or too short or too overweight, “needing to be accompanied by an adult,” having a disability, a previous injury, insufficient skills, laziness, boredom, wanting to avoid the stress of participation, lack of confidence, low perception of own competence, fear of failure, fear of ridicule, academic demands; and “external barriers:” influence of peers or family, lack of time, inaccessibility, cost, friends or family don’t participate, safety of recreation centre, parental limits on freedom, jobs, relationships, home responsibilities and homework. The list of barriers is almost as long as the number of participants and, although the researchers do not discuss this factor, it illustrates the complexity of adolescent lives and the intricacy of the puzzle of non/participation. No single solution would
overcome this range of barriers. The participants were asked for recommendations and they suggested more facilities, closer to home, in better repair, mandatory school physical and health education classes and more community athletic role models and activity field trips as well as reduced fees. Many of these participants were restricted by cost, facility distance, after-dark rules and competing responsibilities. It seems that in-school programs and classes would provide the most accessible solution to the majority of the group. These would also be ideal for offering skills improvement, supervision against risky activities or taunting and overall convenience.

The study focus is on barriers; however, several clear motivators were listed by the participants as well: enjoyment, competition, mastery of skills, achievement of personal goals, opportunity to socialize, stay fit, healthy benefits, become physically attractive, feel good about themselves, have a good reputation, feel self-confident, increase self-discipline, relieve stress, decrease tension and anger and a positive leisure pursuit (as opposed to negative or destructive). Some of the boys had a positive relationship to physical activity and a personal commitment and relationship with their own fitness.

The method in this study was highly successful in gathering personalized meaningful data without relying on static questionnaires, scales or assessments. It has been found that girls, more than boys, value social and fun aspects of sport and want a safe enjoyable playing environment and that girls shoulder more family responsibilities and are hampered by more safety restrictions. All of these factors were expressed by the boys in this study. The proportion of the responses, however, is not stated so it is unclear if only one participant worked substantial extra hours or felt the risk of being teased if he didn’t play well enough etc. as no quantitative methods were used at all. Nevertheless, the complexity of the participants’ lives is successfully reflected.
In a related study Dwyer et al. (2006) researched girls’ perceived barriers to participation in physical activities. Their sample size of seventy-three was larger than Allison et al.’s and was voluntary based on interest. The identified barriers include: lack of time due to jobs, family responsibilities, homework and academic stream extra homework; engagement in technology-based activities, having no nearby friends in which to participate with, peer and family expectations to not be active, prioritization of non-physical and health education courses, school staff or community centre restrictions of non-traditional sports play, safety in public places, inaccessibility, cost, no PHE in one semester of a semested school or not part of an academic stream, inconvenient practice times, limited equipment, competition and pressure, contradictions with notions of expectations for feminine behavior and discomfort being active in front of boys. The authors note the suitability of the ecological model encompassing factors in the social intrapersonal physical environments’ influencing barriers on participation.

The authors do not discuss the unique aspects of girls’ lives such as lack of safety in public places, parental concern over that safety or the girls’ clearly expressed concerns over unwanted stares and attention of boys during physical activities. “Guys are perverted. When you’re doing jumping jacks, they’re staring too hard. And guys want to run next to you if you have big boobs.” The authors go no further than stating that some girls felt self-conscious in front of boys and that the above comment illustrates discomfort. The boys in the Allison et al. study also had public safety concerns, preference to play with friends and homework, family and job pressures, but they did not mention feeling imposed upon by unwanted female or male attention or aggressive staring. In fact, they mentioned the benefit of physical activity to their popularity among girls and the desirable attention they (perceived they) received. It is discouraging to learn that girls face the same silent barriers and inhibitors to safe, comfortable
participation that has been documented for decades and that it is the girls who are left alone with
the responsibility for their resulting discomfort. Dwyer at al.’s work is useful though only a
small sample and one focus group details barriers. It is likely these barriers, expressed by the
girls themselves, that will now be used in future questionnaire-based studies.

In my study *Early Adolescence, Gender and Participation in Physical Activity* (Graham,
1996), I found several factors that motivated participation in physical activity including
competition (boys only), value of being active, time with family and friends/social, familiarity
with location, sense of achievement and physical and health education classes as a break from
deskwork. Fatigue, being thirteen, physical and health education classes, gender-related teacher
impediments, self-evaluation and concerns over violence and injury were factors that
discouraged participation. As with the newer ecological studies, this study did not set out to look
at barriers as much as a multitude of factors that may or may not encourage participation or
attrition from PPA. Community centre age restrictions for specific programs, coach and teacher
restrictions of certain activities to either girls’ or boys’ participation (football and gymnastics
respectively) and coaches ignoring the girls in a community program were reasons cited that are
not in the barriers and motivational body of literature, but gender related concerns are found in
the feminist literature. Concerns over violence or injury from participation were also absent from
the barriers literature although rates of injury are given attention by researchers in other sports
literature.

**Motivation – and experience, behavior, habit and identity.** New research has
identified that individual personality differences are at play in motivation and quality of
experiences with physical activity. Findlay and Bowker (2009) discovered that individual sports
orientation of participating for enjoyment, of being in competitive sport, or because of personal
goals was associated with positive increases in self-concept, whereas participation for the purpose of winning had a less positive impact on self-concept. They concluded that a right fit in degree of athletic competition and personality held importance. “There is no ‘one size fits all’ for interventions nor is there one set of recommendations for coaches and parents alike” (p. 38).

A behavioural sciences study by Schneider & Graham (2009) examined adolescents’ personality traits, their reports of pleasure versus pain or unpleasantness from exercise, and their participation behaviours. Those adolescents with a personality trait more sensitive to cues for punishment (unpleasantness) were more likely to find exercise, even at low intensity, unpleasant. Those with a trait rendering them to be more sensitive to reward found exercise pleasurable. The fitness levels of both types were found to be comparable. The authors recommend including other pleasurable activities with exercise for adolescents because those with the personality type to find exercise unpleasant may be at greater risk of sedentaryism. Indeed, Whitehead and Biddle (2008) found, in their qualitative exploratory study, that some participants reported avoiding physical activity and sport because it was unpleasant. They felt lazy and unmotivated and had settled into a pattern of minimizing activity, whereas the physically active participants reported positives from PPA including an indefinable “‘buzz’” that kept them returning to activity. Engstrom (2008) also noted that positive experiences and habit could come together as a form of Bourdieu’s *habitus* as participants were either sporty and active or non-sporty and non-active in their identity, understanding and behavior. This mixture of reports from differing disciplines produces a similar picture: that the experience of physical activity might include psychologically individual and different experiences (Schneider & Graham, 2009), and that various associations of pleasure may collude to support motivation and sustainable participation. Furthermore, children report pleasure in participation, and childhood activity patterns influence
adolescent and adult patterns, so investigations into where, when, and why this innate pleasure is lost is key to understanding and supporting sustained participation over adolescence.

The literature consistently demonstrates that fun, friendship, and enjoyment are crucial motivators for participation in sport and physical activity (Bush et al., 2010) especially for girls (Dudley et al., 2010; Lenskyj, 2008; Whitehead & Biddle, 2008). Supportive teachers, parental logistical support, and opportunity are also important. Enjoyment is enhanced when participants experience fun, a sense of achievement, a match between their perceived competency level and the tasks or skills involved, a sense of encouragement from others and of belonging and from physical pleasure itself (Dudley et al., 2010; Ketteridge & Boshoff, 2008). Enjoyment is reduced by a sense of physical displeasure, self-perceived appearance or competence being unsuitable, teasing, lack of support from teachers or a sense of lack of competence by teachers. Girls may also prefer non-competitive sports options, single-sex classes, and fitness or activity or fun emphasis over sport skill focus (Dudley et al., 2010; Whitehead & Biddle, 2008). Three different studies, each from a distinct theoretical perspective, had very strong findings on fun, enjoyment and friendship being the key motivators.

The majority of the research adheres to quantitative broad pictures or focused single elements influencing participation and most studies focus on one specific aspect of personality or involvement or factor (e.g., parents) that might influence participation in activities. A few newer studies utilize qualitative more holistic methods, which help to create a fuller picture. Using focus groups with open questions in a qualitative study of active 16-17 year old girls in rural Australia, Eime at al. (2008) deduced motivators and barriers to participation. Motivators included liking competitive sport, parental activity level, social element, fun, health reasons and having an emotional outlet. Barriers were lack of time, dislike of PE, poor experiences with a
coach, perceived lack of skill, dependence on parents driving, prioritization of academic work, low parent involvement and not knowing anyone at a sports club if they moved. This kind of eclectic list of positive and negative influence on participation comes from open qualitative research. Casey et al. (2009) used a socioeconomic model to consider the participation of grade seven girls in rural Australia. Fun, friendship, non-competitiveness, teacher support and enjoyment, parental logistic support and appropriate skill encouraged participation.

In a study of 14 and 15 year old formerly reluctant and subsequently active PHE students, Brooks and Magnusson (2006) demonstrated that applying a feminist and sociology of child studies approach to qualitative methods brought insight to effective research for methods of improving physical activity participation. Theirs is the first, and likely only, study with a sociology of childhood approach in relation to physical activity to my knowledge. Using focus groups in a school that had deliberately implemented changes in their PE department by utilizing their own students’ reports of their experiences of PE, Books and Magnusson explored the experiences of the students who had adopted an active participatory role but who had formerly successfully avoided participation. Their findings confirmed that positive teacher input, a conscious shift in a PE department toward student-centred experience and preference, and a culture of encouragement and inclusion, can effectively alter the participation and PE involvement identity of formerly disengaged PE students. More studies using open qualitative and mixed methods or ecological models would continue to generate data of participant experience and fill in the picture on influences and motivational factors.

**The Role of Skill in Participation**

Physical skill, motor skill, sports skill and competence all may influence participation through their effect on self-confidence, self-perception, self-esteem and enjoyment (see also next
section of this review). Skill has been found to relate self-worth and self-perception (Bunker, 1991; Craft, Pfeiffer & Pivarnik, 2003). Not all skilled or talented individuals will grow to be avid participators and those moderately skilled may or may not become committed participators, however, in general, without skill there is limited comfort, confidence, repertoire or pleasure – in short, limited incentive to participate. Physical literacy is essential. The literature that considers skill development is an inconsistent collection of evaluation of different physical skills among different age groups conducted at different points over the past fifty years. Developmental psychology texts provide clear stages of normal motor development yet they conclude with running or with early childhood. Once a human can grasp, walk, run, or maybe skip, the interest in crucial development ends.

We live in a society concerned with text and academic performance and, though it is unlikely our long ancestry evolved to produce a society of scholars, academic and text-based activity is considered utterly necessary and most of a child’s day is spent in efforts to further develop this skill set. The other aspects of human-ness and skill - interpersonal, physical, fine-motor, creative, spiritual, expressive, productive, mechanical, problem-solving etc. are often considered only in relation to academic pursuits and success. The individual’s relationship to the other aspects of themselves, for their own sake or for their health and wholeness as a person, as a goal in itself with inherent value, is given minimal, if any, time and attention in academic spheres. Yet the essentialness of physical activity and fitness is widely recognized by government, health and some educational authorities. Physical literacy is relatively new to the curriculum and the limited research and discussion in the area underscores that this aspect of human development and education has yet to be fully embraced.
Skill building activities support physical activity retention, as does an expectation that the activity will bring increased fitness levels (Boyd & Yin, 1996; Hoyle & Leff, 1997; Thuot, 1995). The studies focused on skill levels evaluate performance level and give consideration to potential connections between sports performance and sports adherence (Butterfield, Lehnhard & Coladarci, 2002; McKenzie et al., 2002; Oakley, Booth & Patterson, 2001). Each project concerns itself with a subset of skills, a specific age group and sample. There are huge gaps between these subsets of data and so no clear picture of normal or performed skills among the wider populations has yet been established, and the results that exist are sometimes contradictory.

There is no one result among studies comparing children’s skill levels and skill-developing opportunities. Generally it has been found that there is no difference in overall skill or aptitude among girls and boys during their early and pre-pubescent years (Butterfield et al., 2002; Hamstra, 2003; Loovis & Butterfield, 1995). Girls and boys do demonstrate different strengths (Krombholtz, 1997; McKenzie et al., 2002; Okely & Booth, 2004). From age five to nine there is a steady improvement in fitness and skills among both boys and girls (Butterfield et al., 2002; Krombholtz, 1997) and this pattern has been found to continue to grade eight (Derri, Zissi & Pachta, 2001). Opportunity for skill development, however, may differ greatly among children and result in different skills performance as some children gain experience, training and practice. In young kindergarten children’s T-ball parents and teachers were observed modeling gender-restricted roles (the men being the “real coaches” while women took organizational and supporting roles) and children with existing skills were given more encouragement and practice time (Landers & Fine, 1996). No doubt if this pattern continued throughout their sporting experiences a skills gap would grow over time. Teenage girls have said they avoid participation if they feel their skills are too low (Eime et al., 2008).
Both girls and boys improve their skills when they engage in out-of-school activities (Krombholz, 1997; Okely et al., 2001). Ethnicity was not found to be a factor in children’s sport skills levels (Lindquist, Reynolds & Goran, 1999; McKenzie et al., 2002; Sallis, Zakarian, Hovell & Hofstetter, 1996). Socioeconomic status may play a role. Okely and Booth (2004) found no difference among SES groupings; however, children with more socioeconomic privilege were more likely to receive extra outside-school classes and have higher VPA time within them (Sallis et al., 1996). Others (Lindstrom, Hanson & Ostergren, 2001) have found that those with lower SES have less leisure time though this would likely apply more to teens of working age and adults. Broad longitudinal studies do find a correlation of lower participation rates with lower socioeconomic status (for example Engstrom, 2008; Findlay et al., 2010; Lee et al., 2009 Lunn, 2010; Miles, 2007; Richards et al., 2009). Lindquist et al. (1999) discovered that children of single parents watched more television but also engaged in more vigorous activity. Girls in these families received less overall habitual exercise and fewer outside-school classes. African-American children in single-parent homes engaged in more team sports. Boys, Caucasians and physically mature children from single-parent homes had higher fitness levels than other children. Lindquist et al. point out that this illustrates the multi-dimensional nature of physical activity among children (1999).

The studies that measured and compared children’s specific skill levels chose a small number of skills to evaluate, such as a step test, sit and reach or jump. The decision about which skills matter and are important or indicative of something meaningful is a subjective one. They make useful research elements but the act of isolating them without context or explanation leaves their relevance of their relationship to sport performance, participation, adherence or enjoyment undefined. Why, for example, is side-arm striking a popular skill measurement choice? Does
the jump test (how high the participant can jump and touch a wall) not account for the height of the individual participant? If one can jump and reach their toes will they be more inclined to stay with sport? Aside from the potential obscurity of these isolated measures, basic physical literacy creates the choice for participants to engage in activity. For example, competence in even a few areas such as swimming, skating, one or two team sports and some Pilates, martial arts or yoga basics at least creates a foundation for participation. Skills do matter and if they are taught within an environment and curriculum suited to the learner they can empower the child or adolescent. Having skill and physical literacy is important but so is the belief that one has skill. Self-perception of having skill has been found to be a significant factor in adolescent participation (Barnett et al., 2009; Shen et al., 2007; Wang, Liu, Lochbaum & Stevenson, 2009; Yungblut et al., 2012) and also influences self-efficacy toward participation (Dwyer et al., 2012).

**Physical Activity and the Importance of the Self**

Much of the attention of research originating from psychology and the health sciences on participation in physical activity considers self-perception, self-concept, self-efficacy and self-esteem. These elements of aspects of the self that may relate to other feelings, beliefs or behaviors are frequently examined in this work using a scientific model and standardized assessments and measures. To clarify, in non-behavioral sciences language the essence of the research questions is as follows: How do adolescents feel about physical activities and sports and themselves in physical activities and sports? How do they feel about themselves in general? How do they think others think/feel about them? How do these factors affect or relate to participation in physical activities or sports and how does participation affect how they feel about themselves?
Surveys, assessment tools and questionnaires are the methods of choice in these disciplines so the narratives of participants are not captured and the results reported do not resonate with participants’ personal experiences or their expressed feelings. The most notable absences are the voices of those who have fallen out of sport altogether. Nevertheless, this kind of research can pinpoint detailed aspects of self that relate to participation. Self-perception refers to the individual’s understanding and belief about themselves in general or on a particular aspect of themselves. Self-concept is similar but relates to identity; self-efficacy refers to an individual’s belief that they can influence, control or affect events and their own behaviour and achievements; and self-esteem refers to how the individual feels about and values herself or himself.

Participation in physical activities is generally thought to be good for all the self-related concepts though the detailed variables used in the research tend to create results pointing in several directions. A positive relationship has been found between self-esteem and participation in physical activity by Butki (2000), Eime et al. (2013); Erkut and Tracy (2002); McHale et al. (2005), and Schmalz, Deane, Birch, Krahnstoever and Davidson (2007). De Ryke (1995) found that participation in physical activities with academics caused no difference to self-esteem (Schneider, Dunton & Cooper 2008) yet Richman and Shaffer (2000) found it improved self-esteem and Ference (1999) found participation in school sport did have a positive effect on adolescent self-perceptions and identity.

Athletes were found to have higher self-esteem than non-athletes by Findlay and Bowker (2009) but the authors note that not all adolescents will necessarily have higher self-esteem from involvement in physical activity and Schneider et al., (2008) reported no increase in adolescent girls’ self-concept ratings after a nine-week intervention in which their cardiovascular fitness and
participation increased. Usher et al. (2007) found that less involvement in physical activities was correlated with less well-being. Simpkins, Fredricks, Davis-Kean & Eccles (2006) found that college-aged students’ self-esteem was higher if they had sports experience proceeding college. There is a potentially causal relationship as girls with higher participation at age 9 and 11 had higher self-esteem at age 11 and 13 than their study peers (Schmalz et al., 2007) and Eime et al. (2013) recommended further research on the potentially causal relationship between PPA and self-esteem. Other correlative factors that may contribute to a positive relationship could also be explored (social status and valorization enjoyed by boys, community, school engagement, friendship and sense of competency as well as mental well-being).

It is possible to conclude only that participation usually does good, and does not appear to do harm to self-esteem or well-being. Application of common sense and reading in other fields inevitably leads, however, to the question: “Really?” “What about all those people who feel humiliated and intimidated by sports participation?” In an effort to scientifically isolate specific behaviour related variables these methods strip research questions of multiple considerations and do very successfully test particular hypotheses yet they also abandon the context in which their participants exist and the multiplicity of forces at play in their lives and experiences. That being the case, these micro examinations offer some contribution to the overall picture.

Sense of efficacy and enjoyment versus suffering receives some attention in the psychology literature (e.g., Schneider & Graham, 2009). Participants with higher self-efficacy were found to choose to participate in physical activity and have higher expectations and beliefs about their future efficacy (Chase, 2001). It is very conceivable that people who already feel in control of their experiences and chances at success would be more confident participating in sports. Enjoyment predicts commitment to sports and an intention to participate again in the
future (McDonough, 2003) and one could assume that feeling good about oneself and about one’s ability to control outcomes would also contribute to enjoyment, or at least to management of failure. Burkhalter and Wendt (2001) looked at physical and health education students and found those who felt alienated from the class were less fit. Among Page, Lee, Miao, Dearden & Carolan’s (2004) participants, those who were inactive were more likely to suffer shyness, loneliness and hopelessness. Bunker (1991) insists that self-confidence is increased from successful experiences and that successful experiences in motor activities are crucial for children and adolescents. This is the key – that the experiences are indeed successful, by the child’s definition and experience. Bunker does go on to stress that teachers need to overcome their “sex biases” so all children can experience support in a range of activities.

Children’s and adolescents’ self-perception of their physical competence is a crucial part of their intention to participate. “Youths who believe they are skilled…(are) more likely to continue…” (Simpkins et al., 2006). Those with lower self-perceptions were found to be less fit (Burkhalter & Wendt, 2001) but, as with most of these studies, causality is not claimed or explored. Boys’ self-perception is often higher than girls’ and they participate more than girls (Chan et al., 2003; Raudsepp, Liblik & Hannus, 2002). Ten- to 13-year-olds’ self-perceptions of physical competence were considered to be largely accurate in a study by Raudsepp and Liblik (2002), but McKiddie and Maynard (1997) found grade seven students’ self-perceptions to differ from their teachers while grade tens’ were very similar to their teachers’ assessments. In an earlier study Lintunen, Leskinen, Oinonen, Salinto & Rahkila (1995) concluded that “self-perception becomes more fixed with age” (this is supported by Simpkins et al., 2006) and that self-esteem largely increases with age. Participation itself seemed to influence perceived competence among girls and boys in a study in Turkey (Asci, Kosar & Isler, 2001). If young
people’s experiences include challenges that are suitable for their skill level and they experience improvement, they may be more likely to benefit from strong self-perception and to consider their experiences as positive.

The research on self-perception is interesting as higher self-perception encourages participation, and self-perception is strongly influenced by parental perception. The influence of peers’ perceptions and teachers’ perceptions would be interesting future research. If the accuracy of self-perception is age sensitive it may be useful to see when children’s self-perceptions are most fluid and by when they need to have established competence (as assessed by standardized measures by teachers and coaches) to sustain a perception of competence through adolescence and into adulthood. Is there a window of time that, once passed, significantly decreases the likelihood of a level of self-perceived competence strong enough to encourage lifelong participation? Coupled with this assumption, a sociological inquiry, and an understanding that skills performance alone may not be the only influence on self, teachers’ or peers’ perceptions of physical competence, would help to flesh out the picture of self-perception as a factor in participation.

**The School, the Family and Gender**

Studies reviewed in this section are generally from the disciplines of education or sociology, although as in other sections, there is inevitably some overlap with other disciplinary approaches. The focus goes away from the individual to the contextual influences on the individual such as school and family. While gender has already been introduced as a component of various studies of participation, here our emphasis is more on studies that take a feminist approach and make gender central to the analysis rather than peripheral.
Physical and health education in the school curriculum. Physical and Health Education (PHE or PE) classes are the logical place to turn when considering the physical activity levels of young people. They bear the responsibility of public education in sports, skills and health and the burden of the brunt of recommendations for interventions and improvements in young people’s impressions of physical activities and sports. It is easy to hold PHE teachers, curriculum and related school activities responsible for all the woes of negative childhood sports-related memories. Whether or not this is fair can be debated. It is certain that through public education and governmental regulation of all schooling of children in Ontario and Canada, PHE (and some supplemental daily active school programming in some provinces) is the only sports related experience each and every child will be exposed to before adolescence and the only place in which they will all have a choice about continuing on with PHE classes after the onset of adolescence when school PHE classes become optional. It is within this venue that early experiences form many students’ notions of the value and quality of experience of physical activity, of sport, and of PHE as a school course. It is a weighty place. There are many classes in which students may decide on their like or dislike of writing and reading but only one that addresses the body and the student’s personal relationship with their own physical self as well as how that physical self interacts with other students, sports, the teacher, the school community and programs and similarly modeled programs outside the world of school. Whether or not the creators and deliverers of the PHE experience are conscious of this fact is probably individual. But the uniformity of the exposure of students to PHE experiences renders it a fascinating place to study the experiences, reflections and thoughts of young people and physical activities, and school and the body. Rarely are those experiences collected over the course of a school career without some poignancy.
Much of the literature on PHE concentrates on the physical fitness activities achieved during classes. This is important as, particularly in Ontario, quantitative guidelines for activity levels are in place. In 2005 the Liberal government in Ontario instituted a twenty-minute-per-day rule for Daily Physical Activity for all students in grades 1-8 with the intention that it be MVPA. It seemed to be assumed by the Ontario Government that a PHE class provides adequate cardiovascular activity to qualify as a workout and in Toronto District School Board schools, students are not given a twenty-minute DPA session when they have a scheduled PHE class. It is unclear if PHE teachers plan for every class to provide a workout. Some classes may place more emphasis on skills, technique or conventions of play or be sedentary health classes.

Several studies have assessed how much cardiovascular activity actually takes place in a typical PHE class and most have found that they do not consistently provide adequate MVPA (Biagioli, 2001; Dwyer et al., 2003). Fairclough and Stratton (2005) found that MVPA was highest during PHE classes among boys, among skilled students and during games as opposed to skills sessions. The authors recommend that MVPA time be considered when lesson planning for PHE. Indeed, Senne, Rowe, Boswell, Decker & Douglas (2009) found PE students’ activity levels were much higher during skills activities and game play portions of the class than during teacher instruction or course or classroom management time. Beets and Pitteti (2005) fitness tested fourteen- to nineteen-year olds at a midwestern high school in the United States. Both boys and girls participating in school PHE were not as cardiovascularly fit as those in PHE in addition to other school sponsored sports. PHE, as it is currently delivered, does not provide enough MVPA on a regular basis. PHE does, however, play a key role in the MVPA amounts in adolescents’ lives. Kirby, Levin & Inchley (2012) found the best predictor of girls’ MVPA was the number of hours they spent per week in their PHE class.
PHE classes usually involve structured skills sessions and game play. Mahoney, Larson and Eccles (2005) argue that there is an increase in the amount of structured sports play among American children and adolescents and that there is a resulting decrease in unstructured playtime and a decrease in the appeal of unstructured play. They do not actually have evidence of a causal relationship. It is possible that the free-play is, or would be, used for unstructured inactive pursuits such as television watching if structured play were not being provided. Unstructured time, whether or not in reality it bears a relationship to structured active time, has benefits of its own, argue Marlett and Gordon (2004), as even in unstructured PHE lesson components, students learn to work with one another and sports processes. They also argue the merit of structured skills education for developing thinking and reasoning skills. Schools, and in particular school PHE departments, offer school-based intraschool teams, house leagues and sports clubs in varying amounts depending on the school. Participation in extra-curricular structured, organized sports and physical activities, both those offered by schools or elsewhere, is consistently associated with overall increases in PA and MVPA (Trilk et al., 2001) and better adherence to PPA (Bélanger et al., 2009; Kjonniksen et al., 2009). Students respond to these school offerings differently at different ages. For example, Pate et al. (2010) found that grade six and grade eight girls like the same activities but the grade eights were drawn to more structured, school team and organized contexts for play. Eime et al. (2013) also found age-related preferences for structured play. By grade 11 female students had moved from organized sport choices to non-organized and less competitive contexts and individual sports compared to those in grade seven. The authors recommend recognition of the complex nature of PPA.

Evans, Davies, & Penney (1997) argue that primary school PE classes have a critical influence on how children think about themselves and others. This point is supported by the
research on barriers and motivation in which adolescent students reflect on earlier experiences and existing fears of being ridiculed because of their abilities or performance and why they sometimes avoid sports participation (Allison et al., 2005; Dwyer et al., 2006). Evans calls for an increase in women teachers’ involvement in curriculum development, as they are so often the teachers of PE for young children. This argument also assumes that core, as opposed to PE specialist, teachers teach the PE program in primary schools. Teacher qualifications in PHE classes for JK-8 students vary. A Toronto study of core teachers teaching PHE in elementary schools found that teachers perceived the priority of PHE to be low within the educational system (Dwyer et al., 2003)

The quality of the PHE experience directly influences whether or not students opt for optional PHE in later school years (Gibbons & Humbert, 2000; Ntoumanis, 2005; Van Gyn, Higgins, Gaul & Gibbons, 2000). Higher PHE participation was associated with higher participation rates in leisure physical activities (Bengoechea, Sabiston, Ahmed & Farnoush, 2010) as well as quality of the PHE experience (Cox, Smith, & Williams, 2008). Adolescents in two Australian studies reported being positively influenced by teacher encouragement and a sense that their PHE teacher was competent in physical activities (Casey et al., 2009; Dudley et al., 2010). PHE is generally liked by adolescent students according to Anderssen (1993) and Bengoechea et al. (2010) and, not surprisingly, is liked most by high school boys and by physically active students (Anderssen, 1993; Koca & Demirhan, 2004). Contrarily, PHE is considered unsatisfactory by VanGyn (2000) who states that “for two decades young women have expressed clear dissatisfaction with existing physical education programs” through their enrollment rates of 10 per cent for optional PE in British Columbia. The statistic for boys’ enrollment, however, is only 20 to 25 per cent and while that is double the girls’ enrollment, it is
still so low it warrants concern. It is clear the program is not considered worthwhile by the vast majority of BC youth. The authors conducted focus groups to gather girls’ thoughts on PE and distilled student insight they then used with participating school PE teachers to create pilot in-progress interventions.

The enjoyment level in PHE is highly associated with PPA outside of school (Barr-Andersen et al., 2008; Bengoechea et al., 2010; Hashim, Grove & Whipp, 2008; Liu, Wang & Xu, 2008; Taber et al., 2011) and so enjoyment, fun and likeability of the in-class/gym PHE experience should be given attention in programming and research. Liu et al. (2008) found that students wanted a range of activities on offer, and recommended that PHE classes cater to the needs and preferences of their students. Hill & Hannon (2008) conducted action research to include high school girls in the development of their PHE curriculum and found it important but challenging. Girls valued feeling that gender equality was practiced in their PHE classes (Barr-Anderson et al., 2008). Girls also sometimes reported a preference for less competitive-oriented programming and less competence-focused programming. Feminist scholars (e.g., Lenskyj, 1995) note that girls often value fun and friendship in sport and PHE experience. Enjoyment could be reduced by team selection processes (Cardinal et al., 2013), or peer teasing (Cardinal, 2013; Slater & Tiggerman, 2011). Kirby et al. (2012) found that the presence of showering facilities actually reduced PHE likeability. Feeling skilled and competent, again, increased enjoyment (Shen, McCaughtry & Martin, 2007).

There seems to be much discussion in the literature about the strengths, weaknesses, successes and fairness of PHE, yet no consensus on the ultimate, specific purpose of PHE. Hayden-Davies’ (2005) discussion paper argues “for PE to be ‘high quality’ it should actively aim to prepare children to participate in lifelong physical activity…by focusing on skills and
attitudes to be used outside limited curriculum time” (p. 45). The potential translation of a physically active life from school classes to all of life is the ideal achievement of physical education, in addition to supporting adequate weekly activity levels, from a participation and health point of view. Whether or not this transference to an active lifestyle is possible or realistic, and how it might best be achieved, is something for further consideration. Should PHE classes be the providers of a full workout, or skills development, or education or all of these? Should schools provide workouts, skills development, house leagues, clubs and inter-scholastic opportunities regardless of courses, grades and credits? Should some parts of PHE be mandatory and others optional? What is most likely to transfer to life beyond grade eight, ten or twelve - mandatory fitness sessions, skills development or student selected sports units? Are schools responsible for seeing to all, or part, of young peoples’ daily physical activity requirements? If fitness is extrinsically imposed upon students will they be reliant on this and cease to continue on their own? The longitudinal research has not yet examined the intricacies of specific experiences. What is known is that pleasurable activities receive further pursuit and that students like to feel they have choice, capacity for competence, support, and a sense of achievement in their structured school sports time.

**Parental influences on young people’s participation in physical activity.** Many of the studies identifying barriers and motivation to participation in physical activities listed parental influence as either a contributor or detractor to their children’s involvement in sports or exercise. The research on the role of parents in the sport and exercise patterns of children and youth has increased dramatically in the past five to ten years. Early research on socialization and the role of the family in shaping a child’s life made clear the powerful roles of significant others, most critically the parents. Not surprisingly, this newer body of research on parental influence in
children’s participation in physical activities confirms that parents do have a tremendous and instrumental effect on the activities of children during their non-school hours. Researchers have examined the ways in which specific parental behaviors impact their children and their ultimate participation or non-participation. Overall, mothers and fathers influence their children toward participation through the following actions:

- Modeling exercising behaviour and participating themselves in sports or physical activities (Bois, Sarrazin, Brustad, Trouilloud & Cury, 2002; Davison, Cutting & Birch, 2003; Deflandre et al., 2001, Deflandre, Lorant & Falgairette, 2002; Lunn 2010; Power & Woolger, 1994; Toftegaard-Stoeckel et al., 2011; Wright, Wilson, Griffin & Evans, 2010)
- Logistically supporting their children by enrolling them in activities and driving them to and from the activities (Casey et al., 2009; Davison et al., 2003; Eime et al., 2008; Hoefer, McKenzie, Sallis, Marshall & Conway, 2001)
- Showing emotional and psychological support toward their children’s participation (Anderson, Funk, Elliott, Smith, 2003; Kay, 2000; Leff & Hoyle, 1995)
- Financial support of activities and time/other accommodations (Kay, 2000)
- Perceiving their child to have athletic competence (Anderson et al., 2003; Fredricks & Eccles, 2005; Kimiecik & Horn, 1998)
- Believing in the merit of physical activities and in moderate to vigorous activities (Kimiecik & Horn, 1998)
- Pressuring their children or being perceived by their children to pressure them into participating in sport or physical activities (boys only), (Leff & Hoyle, 1995)
• Pursuing their beliefs about gender-appropriate participation in sports or activities and guiding their children toward these activities through providing related toys or equipment, taking them to events or games and enrolling them in these activities (Clarke, 2001)

• Having a strong attachment relationship (between daughters and fathers) (Kellar-De Mers, 2001)

Parental support has been widely reported as a positive contributor to participation (Anderson et al., 2003; Casey et al., 2009; Eime et al., 2008; Hsu et al., 2011; Leff & Hoyle, 1995; Mulhall et al., 2011; Trost et al., 2003) and this effect continues over time (Fredricks & Eccles, 2005). Parental support has been found to increase children’s self-esteem (Leff & Hoyle, 1995). Parental pressure was perceived as support and increased participation in Anderson et al.’s study (2003) and in another study was found to diminish the children’s enthusiasm for the sport (Power & Woolger, 1994).

The literature on motivation and barriers covered earlier mentioned parents or family as a potential discouraging factor from participation in physical activity. Usually this outcome was related to academic responsibilities being held in higher esteem than sports or playing. The selection of physical education and health classes throughout high school is often overridden by the selection of other courses perceived to have greater academic merit, and time after school was considered better spent on homework and studying. Among other findings of parents as a barrier it was parental concern around the safety of traveling to, or from, a facility or spending time at the facility itself that led to restrictions on the adolescents’ freedom to participate in activities.
Parental beliefs about gender and gender-appropriate physical activities prove significant in several ways. Parental belief about the competence of their child strongly influences the child’s belief about their own competence and the child’s belief about competence strongly influences their likelihood of participating (Bois et al., 2002). Layered on top of this situation is the gender factor. Parents typically attribute greater competence to their sons (Bois et al., 2002), even when daughters demonstrate equal motor skill and aptitude (Mondschein, Adolph, & Tamis-LeMonda, 2000). Parents further enforce this differentiation by surrounding their children in what they perceive to be gender appropriate toys and sports equipment, sporting events and sports classes (Clarke, 2001). Early adolescent boys receive more drives to activities than girls (Hoefer et al., 2001) and this factor is probably related to the perception of boys as more inclined, suited to and deserving of sporting activities. These perceptions are changing as is evident by the growth of girls in sports traditionally dominated by boys’ enrollment and opportunity (ice hockey for example); however, it is not a comprehensive change and even in areas in which the opportunities for girls are very good, their own personal sense of opportunity may be limited by parental or sub-cultural beliefs (e.g., Ramanathan & Crocker, 2009). Children themselves, however, may not have the same gender-stereotyped beliefs as their parents hold or see that they should be restricted, as found in Clarke’s study (2001), yet they do not have the power or influence to change their environment and opportunities. Change in this area would require the other influences in the child’s life (school, community programs, etc.) to welcome all children into all activities and provide as much equality in skill development as possible. These programs are often populated with parent volunteers and parent coaches so it would require a conscious effort on the part of all programs to address the hidden obstructions to girls’ and boys’ participation in a range of activities.
Some studies on the role of parents have attempted to differentiate the influence of mothers or fathers on daughters or sons. This has generated some complex and sometimes contradictory data; nevertheless, the overall importance of parental belief, perception and perceived belief is powerful in every case. Deflandre et al. (2001) found active girls were positively influenced by active mothers. Other studies support fathers’ and mothers’ influence. One study found this factor decreasing in the 1990s compared with the 1980s (Martin, Dollman, Norton & Robertson, 2005). Bois et al. (2002) found that mothers’ perceptions of their daughters’ competence related to the child’s perceived competence but this was not found to be so for sons, yet in similar studies by Kimiecik, Horn and Shurin (1996) and Anderson et al. (2003), all children were found to benefit from positive parental perceptions of their children’s competence.

Parental support is generally considered key (Colley, Eglinton & Elliott, 1991; Hsu et al., 2011; Trost et al., 2003). Davison et al. (2003) found that mothers tended to support their children through logistical actions of enrolling them and driving them to activities while fathers tended to demonstrate support via “explicit modeling” through their own sporting behaviors. Both boys and girls responded to both types of support with higher levels of participation. The authors did not discuss the implication in their findings that the mothers’ support was indeed supportive of others’ participation by providing planning and services and the fathers’ support was really as much a support of their own participation, enjoyment and benefit for themselves as much as modeling for their offspring. Furthermore, if the fathers’ “support” was eliminated the children could, conceptually, continue on with their activities, though they may not be as motivated to do so. However, if the mothers’ support was eliminated the children would not be enrolled in or taken to their activities. These are important distinctions in the overall family
picture and further underscore the different relationships gender has with opportunity and experience of physical activities. Parental – mothers’ and fathers’ – actual participation in physical activities is a major influence on offsprings’ habits and behaviours.

The activity levels of parents themselves proved significant in a number of studies, demonstrating another aspect of the multi-faceted nature of influencers of participation. Parental modeling of participation influences their children and adolescents to participate. In fact even the child’s perception, alone, of their parents as active influences their activity level (Toftegaard-Stoeckel et al., 2011). It is therefore logical to look at influencers of parental participation. Mothers participate less than fathers and their modeling may be most critical for daughters (Bois et al., 2002). Mothers most often reported lack of time and too many family responsibilities, especially if they had young children, to participate in as much physical activity as they would have liked (Brown, Brown, Miller, & Hansen, 2001; Lewis & Ridge, 2005). Two-thirds of the mothers in Brown et al.’s (2001) study received too little activity to meet basic health levels. Lewis & Ridge (2005) describe an “ethic of care” and notions of good mothering that lead mothers to look after others’ needs and potentially neglect their own. Mothers were found by Verhoef & Love (1994) to be less active than women without children, especially if the mothers were under forty years old: “Motherhood itself, rather than number and age of children, was a barrier to exercise participation” (Verhoef & Love, 1994, p. 300).

It is now being found that socioeconomic status (SES) has a significant impact on PPA. Earlier studies did not find SES a factor in participation rates (e.g., Mota & Siva, 1999); however, one study in Slovenia (Doupona, 2001) identified that owning a car made a significant difference to fathers’ participation levels and that higher education and socioeconomic status related to more positive attitudes about the merit of involvement in sports. Newer studies do consistently
state that lower socioeconomic status is related to lower participation rates (e.g., Engstrom, 2008; Findlay et al., 2009; Johnston et al., 2007; Lee & Martinek, 2009; Lunn, 2010; Miles, 2007; Richards et al., 2009; Toftegaard-Stoeckel et al., 2011; Trilk et al., 2011; White & McTeer, 2012).

Both mothers and fathers are more likely to participate in physical activities if they, themselves, participated while they were growing up (Quintero, 2004). Adolescent PPA tracks into and predicts adult PPA (Anderssen et al., 2005; Huotari, Nupponen, Mikkelsson, Laakso, & Kujala, 2011). Childhood and adolescent participation leads to more adult participation and therefore, in turn, to the next generation of child and adolescent fitness. Furthermore, there is a positive correlation of child and adolescent participation when siblings also participate (Deflandre, 2002). Parents, as well as children and adolescents, therefore, should be encouraged to participate in activities, and programming should be targeted at all age groups. This change would address the multiple family influencers and the cycle of behaviors in this set of factors.

The field of research in this area utilizes surveys and some ethnographic approaches. The importance of parental behaviour and influence has been well established. Future research should include specific efforts targeting areas of obstruction to participation by boys and girls, for example parental, particularly fathers’, pressuring of young athletes and children’s participation in physical activities, mothers’ restricted opportunities to participate themselves and parental gendered notions. Improved programs and staff awareness and training to address the gendered variables and children and adolescents’ dependence on parental beliefs, support and modeling can help to address a small part of the areas of weakness in parental support. It must also be said that many parents are doing a great deal to support their children’s participation. No
single aspect of society alone can make change and many parents are doing their part to support, sustain or increase their children’s PPA.

Surprisingly, few studies considered parenting styles, children’s unstructured or unsupervised activities at home or in the community, the structure and programming of children’s lives and out-of-school hours or changes in parenting practices over time. One study (Saunders, Hume, Timperio & Salmon, 2012) looked at parenting style and found no influence on PPA. These aspects to parenting and their relationship to participation in children’s and adolescents’ physical activities would make intriguing future study.

**Gender and physical activity: feminist contributions.** As noted above, it was impossible to reserve all discussion of gender issues when discussing other topics, as gender is frequently mentioned in the literature of many approaches. For example, discussion of parental influences inevitably considers distinctions between mothers and fathers. Nevertheless, it is important to consider feminist research as a separate area, given the inclusion of a feminist theoretical framework in this study (see Chapter two) and the ability of feminist research to put gender at the centre of its concern. Feminist research makes a significant contribution to questions on participation through its understanding of the activity of power relations and the complex, multiple factors influencing girls and women’s lives; and by the utilization of methodology that seeks to understand the actual subjective experiences of participants by listening closely to the participants’ own stories, expressions and interpretations of what they have experienced and what they know. This approach cuts through the broader quantitative pictures and generates deeper, less superficial data. The result is a fresh, often poignant perspective.
Feminist studies, more than other approaches, have consistently identified girls’ and women’s valuing of the fun, friendship, social and enjoyment aspects of participation in physical activities yet this aspect is found to frequently be absent from girls’ structured sporting experiences (Lenskyj & van Daalen-Smith, 2006). PHE is typically about performance executed in front of peers and having that performance subjected to their informal and teachers’ formal evaluation. Researchers argue that girls often find the whole experience from changing into PHE clothes to the unwelcoming atmosphere a deterrent (Humbert, 1996; Lenskyj & van Daalen, 2006). A study (Chen & Shen, 2004) examining motivators in outside-school physical activities and learning outcomes produced mixed results and the authors concluded that the relationship between motivators and learning outcomes was complex and requires further research. Goals and tasks are useful education tools but they do not constitute the entire picture or process of learning.

Lenskyj’s work has drawn attention to the limits of liberal feminist approaches that assume girls and women have equal and similar access to sporting opportunities. She argues that research and recommendations need to consider the systematic barriers that exclude girls from participation (Lenskyj & van Daalen, 2006). Lenskyj & van Daalen (2006) also identified the “chilly climate” girls encounter in sporting and PHE arenas and that the problematization of the girls’ reluctance to participate is misdirected; it is the structural and program practices that need to change.

Robbins et al. (2006) directed a well-intentioned intervention to increase early adolescent girls’ physical activity participation. It is a good example of why the works and messages of authors such as Lenskyj (1995) and Rice (1995) are so critical. The Robbins et al. study, intervention fitness plan, and participant support included an extensive effort utilizing computerized questionnaires and computer generated fitness plans, frequent check-in calls and
mail from health promotion and research staff, and counseling sessions (dictated by formal computerized recommendations) with the school nurse practitioner. There was no difference at weeks one or twelve in the activity levels between the group of girls who participated in the intervention and a control group with no supports. The effort of computer generated feedback, check-ins and support services had no impact whatsoever.

The researchers’ discussion includes detailed consideration of the technical aspects of their support plan. The intervention would have benefited from a feminist approach. Robbins et al. began the study by subjecting each girl to a Body Mass Index assessment. This assessment was followed by a questionnaire, issued on a laptop computer, asking demographic information and physical activity participation levels. A computer generated plan for physical activity recommendations was issued to each girl. All of the subsequent support and follow-up content was dictated by the computer program, even if it were sometimes read out to the girls. There was no spontaneous friendly support, no interactive physical activity time, no consideration of pleasure, joy or social components to activity. And there was no increase in activity. The social world of girls – who they are and what they like – was ignored and the intervention failed completely.

Another reality for girls is their experience of gender and the body as they move from childhood through adolescence. The body and the self are closely connected and issues of identity and change are dramatic during these years. The area of body, embodiment and girls is a growing part of feminist analysis of participation in physical activity and health. Rice (1995) states that girls are affected by body image and body image issues often begin at the onset of puberty. Frost also argues that puberty and adolescence is a time when girls must navigate their identity, body and growth in a patriarchal, misogynist environment and this experience results in
body hatred and body hatred practices. Indeed, two times as many females than males are dissatisfied with their body weight (Savage & Scott, 1998), and obtaining a slim figure is a common motivator cited by girls. In the motivation research girls did not list becoming strong or muscular as a motivator and Rice points out that they are not socialized to value being strong or hardy but soft and pretty. Young (1990) observed girls and women’s utilization of space and found that women tend to take up less physical space than is available to them, utilize an isolated part of their bodies for physical tasks and underestimate their physical capacity. Lenskyj & van Daalen (2006) point out that as girls realize the expectation of being perceived as heterosexual they may opt out of traditionally masculine sports they fear could stigmatize them. The body is the terrain through which identity, gender and sexuality, as well as health and fitness practices, are played out.

There is some research emerging on girls and women participating in sports traditionally played by boys and men. Wedgewood (2004), in a study of female Australian Rules football players, argues that playing full contact non-traditional sports can allow women to explore gendered or bi-gendered embodiment in a practice that holds the possibility of liberation. She does acknowledge, however, that the men’s game is still regarded as the “real” game. As more girls’ and women’s leagues in formerly boys’ and men’s-only sports grow there will be opportunities to further research these ideas.

Some feminist research tends to focus on embodiment, sexuality and subject positioning of young people with or without a direct connection to physical activity (e.g. Budgeon, 2003; Frost, 2001). Research on body issues, embodiment and mind-body areas with young adolescents can be sensitive yet it is perhaps an area that holds critical information for improving adolescent participation in physical activities.
Geographical and Environmental Influences

The multi-faceted nature of participation and non-participation in physical activity requires the inclusion of a range of approaches, models and research contributions from sociology, psychology, education, health and feminist disciplines and perspectives. The fields of geography and urban and rural studies make an important contribution to considerations of human physical behaviors. In keeping with an ecological model, many of these studies aim to provide, from their own discipline of origin, a holistic approach. They consider how human, social, socioeconomic and cultural factors relate to the organization of physical space, building sizes and layouts, streets and land use. Their attention to physical activity and urban planning or rural settings is a much-needed component to the physical activity and health and fitness research picture.

The urban, suburban or rural landscape in which a person lives can significantly influence their daily physical activities. Recent research has clearly demonstrated that the design of suburban neighbourhoods, streets and transportation encourages the utilization of motor vehicles for transportation and that people living in the suburbs have, through the design of their neighbourhoods, several barriers to an active life. Urban dwellers, despite living in what may be perceived as congested, smoggy, unhealthy areas, are more likely to be physically active. People living in cities with 100,000 residents or more are 15 per cent less likely to be sedentary than those living in communities of less than 1,000 people (Badland & Schofield, 2006). The walkability of a community influences the fitness and health levels of the residents (Doyle, Kelly-Schwartz & Schlossberg, 2006). Daily commutes by urban dwellers are more likely to involve some physical activity (Loucaides, 2007). This perspective is a necessary addition to the
research that focuses on psychology or personality, such as task or ego orientation, social family and peer influences and institutional influences such as schools.

Rural areas have also been studied with a range of results in adolescent activity and fitness levels. Adolescent participants in the studies identifying barriers to participation in physical activities often mention accessibility, cost, and distance to facilities, or safety of traveling to and from facilities, or of the recreation centre itself. An Australian study found that rural 10- and 11-year-old girls and boys ran faster and were more likely to participate in organized activities such as club sports though less in school-related sports than their urban peers. Another Australian study found that the local sport clubs were key to social connection for rural adolescents (Eime et al., 2008). Loucaides et al. (2007) found Canadian youth in rural areas more involved in school and community activities. Having a part-time job was actually associated with higher levels of participation among the rural participants only. Dollman, Maher, Olds & Ridley (2012) found that urban youth engaged in 11-29 fewer minutes per day of MVPA than rural youth. Their sport and active transit levels were equal but the rural youth engaged in more free play and the authors attributed this difference to more play space and fewer stranger danger fears.

Urban participants in Loucaides et al.’s research (2007) were more likely to be active in their method of transport to school. These findings are not analyzed further but the researchers identified “commuting to school [as] an overlooked source of children’s physical activity” (p. 169 Loucaides et al., 2007). Indeed, Andersen et al. (2009) established that Danish teens that bicycled to school had higher aerobic power and torso strength than those who walked. Unfortunately active transit to school has been on the decline. Miles (2007) noted that in the U.K. car usage for transport to school increased from 15 per cent to 28 per cent between 1975 and
1989 and attributes the increase to “perceived danger by parents” (p. 321). Between 1986 and 2006, Builiung, Mitra and Faulkner (2009) found a decrease in walking transit to/from school among 11-15 year olds in Southern Ontario, particularly among those living in the suburbs. The concept of active transit has gained attention elsewhere as a community health development concept and as an area for research (e.g., Builiung et al., 2009). Canadian children and youth also use less active transit (walking, biking or wheeling) for travelling to school than in previous decades and only 25-35 per cent are currently using active transit, earning us a “D” on the 2013 Canadian Report Card on Physical Activity for Children and Youth (Active Healthy Kids Canada, 2013). The authors attribute concerns around road safety and “stranger danger” to decreasing levels of active transit. Levels are lowest among young children and 15-17 year olds who now engage in an average of 11 minutes of active transit per day, down from 17 minutes in 1992 (Active Healthy Kids Canada, 2013). The report recommends planners include traffic calming and street design protocols to encourage walking and biking, and employer agreements to allow parents to travel with their children to school.

The design of suburban neighbourhoods encourages the use of motorized methods of transportation and discourages active commuting, walking, and connection within and between communities. Half the U.S. population lives in the suburbs and land development continue at an accelerating rate (Vojnovic, Jackson-Elmoore, Holtop & Bruch, 2005). Suburban street designs include high-speed routes and slow residential streets that lead nowhere. The single-use land design means that businesses, jobs, stores, and services are all segregated from where people live (Frank et al., 2006). The roads often (particularly in the U.S.) have no sidewalks and have no interesting sights to see if one were to try to walk though non-motorized travel is hazardous as the entire system is created exclusively for motorized travel (Kolody, 2002).
Walkability is discouraged by this scenario but can be encouraged by other factors. People are more likely to walk on safe, easy to reach, well maintained footpaths (Duncan & Mummery, 2005). Older adults walk when there is local shopping and services, and public transit as well as a good traffic and pedestrian infrastructure (Michael, Green, & Farquhar, 2006). It has been found that women who use urban parks for fitness make greater use of paths if there are continuous loops, hills and/or trails that are safe with regard to traffic and provide a balance of nature and woods safety (Krenichyn, 2006).

However, the bulk of commuting in the United States, according to Vojnovic et al. (2005), occurs in cars between one suburb and another. People cannot walk to facilities, services and work within their community and they cannot walk to one another’s communities. Over 5,000 pedestrian deaths per year in the U.S. are caused by motor vehicles (Vojnovic et al., 2005). Safety in this field of research includes personal safety, destination safety, street safety and a perception of safety. Non-motorized commuting carries with it the benefits of physical activity as well as reduction in pollution, cost to the consumer and the increased chance of communication and community. Walkability and safety (lower crime rates) are key according to Doyle et al. (2006) as people living in walkable areas have significantly better BMI scores, higher self-reports of overall health and fewer weight-related chronic illnesses.

Vojnovic et al. (2005) make a compelling argument for recognition of the relevance of residential design and physical activity and study three communities in Michigan. To encourage pedestrian activity, as opposed to motorized transportation choices, streets must be safe, comfortable, attractive and interesting (“streetscapes”). Neighbourhoods with high levels of connectedness, balanced land use (mixed business and residential) and high urban densities reduce motorized commuting. In the United States it is estimated that people will walk up to two
miles to stores or services and that land use needs to vary at least every two miles (Vojnovic et al., 2005). Vojnovic et al. (2005) go on to describe in detail the features of walkable communities that make a difference: property sizes of up to thirty feet wide, as opposed to two to three hundred feet wide, streets that are not confusing but lead directly to a destination, “fine-grained street systems” that are straight and integrate land use, short blocks with frequent intersections, minimal pedestrian barriers such as expansive parking lots or wide intersections, small buildings set back from the street so interesting streetscapes can form, a sense of safety and slower traffic. Mecredy, Pickett, & Janssen (2011) looked at activity levels of youth and adults in relation to street connectivity and found that more street connectivity was associated with less physical activity among youth grades six to 11 which is the opposite than for adults. Bike lanes had no impact on PPA levels. They attributed the lower youth PPA to perceptions of safety. The researchers did not look at the availability or influence of parks or recreation facilities.

Giles-Corti & Donovan (2002) found that people tend to use fitness and recreation facilities that are closest to their homes more frequently than those at a greater distance and that the facilities favoured above all are informal ones such as streets, public open space and the beach. They also recommended that streetscapes be pedestrian friendly. A study in North Carolina did not find a difference in the activity levels of people in a traditional suburb when compared to a “new urbanist neighbourhood” but they did report that the physically active people used the facilities in their immediate community. Perceptions of facility availability and accessibility influenced use in a study by Ries, Yan & Voorhees (2011). Women and men made use of private facilities equally but women were less likely than men to use public facilities due to safety concerns. Perception of safety also had an influence on public park use check (Nichol,
Janssen, & Pickett, 2010). The presence of major parks was significantly associated with higher PPA (Boone-Heinonen, Casanova, Richardson & Gordon-Larsen, 2010).

Conveniently located recreation and fitness facilities that feel safe are part of the ideal plan as is connectedness between communities. These are all measurable, concrete features of the physical environment that can easily be part of a concept or plan when development or redevelopment proposals are being designed. They do not place the onus to exercise exclusively on the individual by requiring that extra fitness time be found in a working day but invite activity as a natural part of people’s routines and community life. They also create mixed land use plans where it is possible to work and live in the same area. This means more walkability and less time spent commuting thus generating more time for other activities. Physical living layout is one key component of creating optimal opportunity for physically active lifestyles.

Designing pedestrian-inviting neighbourhoods and streetscapes will have little impact on encouraging non-motorized travel and physical activity if walking and cycling is considered undesirable or inappropriate by the population. This is an important consideration within the U.S., where the preference for privacy in low-density, single-family detached housing and reliance on motorized travel are a defining element of American culture. (Vojnovic et al., 2005)

Integrated, active living design is critical as suburban motor-dependent lifestyles prohibit natural, habitual active commuting, connectivity and transport. It does not exist in isolation and will not in itself create a completely healthy community. Combining the contributions of these studies with the health, psychological, sociological, educational and feminist work will provide a more detailed, multi-dimensional picture of physical activity patterns, behaviors, and influencers.
Conclusion

The range of disciplines that have contributed to the questions surrounding participation patterns and inactivity is broad and a great deal of good data has been generated. There is ample evidence that participation rates are too low, attrition occurs over the life course, girls are losing out, and puberty and adolescence are critical times for engagement in physical activities. Each discipline in the research carries its own assumptions, biases, methods and insights and by pooling their contributions a more comprehensive picture of the puzzle is formed. Participation and attrition are influenced by a myriad of factors in each individual’s life and no single solution exists in isolation that alone will lead to every young person embracing physical activity for life. Qualitative methodologies best capture meaningful data for understanding the intricacies of the problem and generating suitable solutions.

Every young person begins life in childhood with a comfortable relationship with their physical self and an enthusiasm for exploration utilizing their body. Children like PA and PHE to start but lose their identification with it (Miles, 2007). Negative experiences, it has been documented, are generated from formal body forums such as PHE and organized sport, from influences of significant others including gender socialization, from later lack of use of the body, from a sense of incompetence and from internalization of negative messages about body, self and worth. These things are imposed on the body and the self and they can, albeit in small steps, be changed. The existing research provides an excellent foundation for understanding concrete changes that can be made now to urban plans, school curriculum and recreational programming and issues directions for further actions in research, education, factors that influence socialization, concept-building and the leading of lives that include positive, accessible, meaningful physical activities.
In Chapter two, I constructed a theoretical framework based on sociology of childhood and feminist perspectives. I argued that participant-centred research approaches that embrace the voice of young people’s experiences of physical activity show promise for unearthing the subtle, powerful influences over participation and attrition, and can further illuminate the interconnected mosaic of elements that support or discourage lifelong physical activity behaviours, attitudes and experiences. Democratically based, equality minded, qualitative approaches could operationalize this approach. In the remainder of the dissertation, I report the results of the research I conducted under these assumptions.
Chapter 4: What They Did – Participation Rates and Activity Choices

The review of the literature in Chapter three made clear that a low rate of participation in physical activity is persistent, that physical activity is the single, greatest support for health, that a gender gap and decline over the life course remains, that studies are revealing more and more about what people do but still have not found the crux of the matter for why people do or do not participate in physical activity, and that more qualitative research is required. Early adolescence is a critical time to consider as young people move out of spontaneous physical play and school recess opportunities and into more autonomous decision making about leisure time, adolescence and eventually optional PHE at school. The sociology of childhood approach embraces qualitative work in the practice, or spirit of, ethnography, with an analysis and understanding that children can be marginalized, disempowered and treated as “other” by powers to which they are subjected, while simultaneously having a sense of agency which they can, and do, exercise.

A methodological approach which involves deliberately listening to children’s or, in this case, early adolescents’, voices is one way to hear children, and through research and writing give them voice. Qualitative approaches were chosen as the main method for this study in order to better grasp the subjective experiences of the participants. Twenty-five girls and boys aged 13 to 14, at the dusk of their elementary school careers, were interviewed in focus groups and individually after documenting their use of time, and later, after being told the main focus of the study, were asked for details on the intensity of their activities and their own ideas on the problem of adolescent attrition from physical activity. Their thoughts, opinions, feelings, ideas and perceptions are the crucial element of this study and this dissertation. It was, in many ways,
a listening project. What can these early adolescents tell us about their experiences of physical activity that might help us better understand participation and attrition and better inform practices of leadership, education, programming and policy in physical activities? To find out, I asked them. How they spent their time, and how much of it was active, is presented in Chapter four and what influenced their participation is discussed in Chapter five. Chapters six and seven are in-depth presentation and analysis of in-school physical activity experiences. This study did not set out to emphasize in-school activities but the students’ discussions emphasized them and they warrant their own chapters.

For the purpose of better understanding participation in and non-participation in, and attrition from, physical activity the main research question was: What are these early adolescents’ experiences of physical activity? I asked what are these young people currently doing with their time? How much of it is physically active? What are they doing, and why? And what is their experience of that active time? What do they think about it and feel about it? The first data chapter of the dissertation is organized to provide a picture of the study participants’ use of time and activity and their attrition and participation through consideration of their dropped and desired activities. The data revealed three consistent facts over and over: these young people valued activity, knew what they wanted, and were significantly impacted by their physical and social environments. These three facts emerged in the data on participants’ lives in their community, schooling, structured and unstructured time.

**What They Did**

As explained earlier, the study set out to understand attrition from physical activity, particularly adolescent withdrawal, through close study of a group of 13- and 14-year-olds’ experiences of physical activity at a time when they were just leaving childhood. Some
assumptions going into the study included the established research: i) that children and adolescents had become increasingly inactive and unfit; ii) that children and adolescents were suffering increasingly from obesity; iii) that there was a movement to less free, unstructured play on the streets and in communities accompanied by more parentally supervised time and structured instructional time in children’s lives; iv) that there had been an increase in time spent in computer based or television watching activities. The study repeated one I conducted in the same school eleven years earlier and so there was scope for comparison over time of activities, experiences and lifestyle elements related to physical activity. The results were surprising. These 13 and 14-year-olds did not fit the stereotype or the data-backed profile of sedentary, obese, inactive, disengaged youth who spent hours a day in front of screens and were shuttled to instructor based activities by ever-present “helicopter” parents. Nor did I find students overburdened by homework or household or work responsibilities. They were relatively active! They engaged in more physical activity than the national averages, were not continually supervised, did not appear to be obese and were not disengaged with physical activity but enjoyed it!

**Time**

To understand why the participants did or did not participate in physical activities, and their experiences of physical activities, I first set out to understand what they were doing with their out-of-school time, whether physical or other activity. If it were active – where was it, how was it, what influenced it, and how was it experienced? A Snapshot Time Budget created a picture of their general patterns of use of non-school hours in a typical week and included their mode of travel and time spent travelling to and from school (see Appendix D). The Snapshot Time Budget had areas for times of day (e.g., Before School) and the participants entered their
activities as they chose to name them. There were not predetermined activity choices so the activities named in Table 2 are those authored by the participants themselves. The participants stated what they did in the time frame. The time frames were provided on the document and the activities were generated by the students. Most students are on a routinized weekly schedule and their habits fall into typical weekly patterns. These students concurred that this pattern was the case for them – they typically did the same things on the same days at the same times week to week with variation by the days but not by the week. The data is divided by gender to reveal the differences and similarities between the girls’ and boys’ activity levels. The gender gap in activity levels and rates of attrition over adolescence was very significant in the decades preceding this study with some narrowing in more recent research (see Chapters one and three).

These 13 and 14 year-olds engaged in a range of activities in their non-school time. Many used active transit methods to travel to school. Their weeks generally included a mixture of time spent engaged in schoolwork, time with family, time with friends, screen time, reading and other activities as well as physically active time. Figure 1 demonstrates the participants’ engagement in an active pursuit (for example playing soccer or walking the dog) during non-school times. The percentage of participants listing a physically active activity is depicted in each time category: before school, lunchtime, after school and weekend time periods.
Figure 1.
*Snapshot Time Budget – Non-sedentary Time.*

The participants included meals, time with friends, watching movies, doing homework and other such activities in their reporting of what they did outside of school. The data were generated from self reporting of an unlimited range of activities and so are confined to giving a broad stroke picture to answer what were they doing with their out of school time. The girls and boys made use of school lunchtimes, after school, and Saturday and Sunday afternoons for active time. The boys used more of their out of school time for active pursuits than the girls, in keeping with existing reports, and most dramatically on weekend afternoons. More specific data on activity choices and intensity of physical activity follows.

All but three of the participants used active transit to get to school. Three girls were driven, and 11 girls walked. Six boys walked and three boys rollerbladed, skateboarded or ran. So most of the participants were using some form of physical activity to get to school but, as seen
in the other data in this study the girls were more likely to be sedentary and less likely to be engaged in more vigorous activity. As a group their active transit was inverse to Canadian averages in which only 24 per cent (CFLRI, 2010) use active transit to school. This finding may have been due to good street connectivity, a pedestrian culture in the area, the presence of sidewalks and other pedestrians, the residential and commercial mix in the area and parental permission possibly based on perceptions of adequate safety in the area.

Over the day, the students’ time was spent in an eclectic array of activities. Once distilled, the participants’ time could be grouped into active, screen and book based activities. As many girls used the school lunch hour for homework as for sports, but the boys used the lunch hour for sports and not for book based activities. After school, girls reported engaging in sports half as often as boys. Girls reported about half as much active time as boys on Saturdays but for girls play in the park was much more likely than in sports.

Table 3 illustrates the participants’ use of time outside of classroom hours in three main categories: time spent on physical activity, screen time, and reading. The percentages represent the number of respondents who listed these activities during the correlating time frame. For example, 7 per cent of the girls and 9 per cent of the boys described their before-school time as including sports, whereas almost twice as many boys as girls reported engaging in sports during school lunch breaks.
Table 3.  
*Time Spent on Physical Activity, Screen Time, Reading*

<table>
<thead>
<tr>
<th>Time Period</th>
<th>Physically Active</th>
<th>Leisure Screen Time</th>
<th>Text/Book</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Sports</td>
<td>Park/Play outside</td>
<td>Computer</td>
</tr>
<tr>
<td><strong>Before School</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Girls</td>
<td>7%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Boys</td>
<td>9%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td><strong>Lunchtime</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Girls</td>
<td>13%</td>
<td>0%</td>
<td>7%</td>
</tr>
<tr>
<td>Boys</td>
<td>27%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td><strong>After School</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Girls</td>
<td>20%</td>
<td>7%</td>
<td>40%</td>
</tr>
<tr>
<td>Boys</td>
<td>45%</td>
<td>0%</td>
<td>18%</td>
</tr>
<tr>
<td><strong>Saturday Morning</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Girls</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Boys</td>
<td>0%</td>
<td>36%</td>
<td>18%</td>
</tr>
<tr>
<td><strong>Sat. Afternoon</strong></td>
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<td>Girls</td>
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<tr>
<td>Boys</td>
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<td><strong>Saturday Evening</strong></td>
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<td>Girls</td>
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<td>Boys</td>
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<td><strong>Sunday Morning</strong></td>
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<td>Girls</td>
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<td>Boys</td>
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<td><strong>Sunday Afternoon</strong></td>
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<tr>
<td>Girls</td>
<td>20%</td>
<td>0%</td>
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<tr>
<td>Boys</td>
<td>36%</td>
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<td><strong>Sunday Evening</strong></td>
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<td>Boys</td>
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*Table 3.* The percentages represent the number of girls or boys who listed these activities during the correlating time frame, recalculated to be a percentage of the girls or a percentage of the boys.

These boys as a group were more active than these girls as a group, in keeping with typical findings in studies comparing girls' and boys' activity levels.

**Levels of Intensity: Low/Medium/Vigorous (LMV) Physical Activity**

Intensity of activity, as was discussed in the review of literature, is relevant to value and effectiveness of participation. To review, low-level physical activity is equivalent to slow walking or gardening, for example. Medium, or moderate, level is brisk walking, and high level, or vigorous, physical activity involves noticeable cardiovascular effort and sweating, for example, running. Debate exists over whether some larger quantities of low or medium intensity physical activity are as valuable as shorter amounts of higher activity. At the time of the field data
collection, the Government of Ontario guideline was that children required at least twenty minutes of medium to vigorous activity (MVPA) per day. The World Health Organization later deemed that children require one hour of MVPA per day and Canada has since adopted that recommendation in public education communications.

Among this group of early adolescents, all but one participant engaged in an adequate amount of daily physical activity by time quantity, according to the standards at the time. The majority also had enough vigorous physical activity as part of their overall activity profile. This pattern was in contrast with provincial and Canadian participation norms. Toward the end of the study when the students knew that physical activity was of particular interest as well as the other things they did with their time, they were asked more specifically about the intensity of their active time. Young people need moderate to vigorous exercise for full activity benefit. Six out of the responding nine boys, and four out of the responding 13 girls engaged in minimally effective amounts of adequate intensity activity by 2007 standards. Overall, the girls were active but most lacked adequate intensity rather than adequate overall volume of activity. Three girls lacked both. The boy and girl with the highest amount of low intensity time also lacked adequate MVPA so low MVPA does not necessarily mean inactivity. However the lowest reported amounts of reported LPA were associated with low MVPA.

Although most of the participants met the required quantity of time engaged in physical activity for the expectations at the time, only half received an adequate amount of moderate-to-vigorous activity. The quantity was adequate, but the intensity was not. By current standards, the quantity and the intensity fall far short of health recommendations. The group was still more active than norms, and still too inactive for optimal health.
Time Spent Engaging with Entertainment Technology

Time spent engaging in entertainment technology has been a concern as a deterrent or replacement to time spent engaged in sports and activities in the literature and popular press. Studies did not confirm that television time necessarily related causally to low levels of physical activity. In this study, participants were asked to identify total time spent engaged in screen technology including computer time not for homework, television, and movies. Their reports demonstrated that hours per day or week engaged with technology (for purposes other than homework) varied greatly and were not associated with levels of physical activity. Participants with two or more hours per day of screen time were equally as likely to engage in adequate low levels of physical activity (LPA) or moderate levels (MPA) or vigorous levels of physical activity (VPA) as those with less screen time, and the vast majority of those with adequate VPA.

Preferred Physical Activities

Preferred or favourite activities varied widely among participants. Hockey, snowboarding, swimming, baseball (rep. level), golf, rollerblading, badminton, kickboxing, tennis, skiing and other sports were all listed as favourites. Outdoor pursuits, even with very little exposure, were reported with great enthusiasm: camping, canoeing, kayaking, rock climbing. When asked what they wish they could do but don’t currently do, archery, rock climbing, golf, karate, mini-putt and kick-boxing were listed. This point is important to note from a programming perspective: no one set of activities will likely capture the interest of the majority of participants for a sustained period of time. Multiple offerings may make a difference, as might choice.
Dropped Activities

Participants were asked about activities they once did but no longer participate in. This aspect is part of inquiring about changes over time, over age, and the life course of participation. All but one participant could list at least one dropped activity. Dropped activities were usually team based, though swimming was mentioned frequently and gymnastics and ‘playing in the park’ were listed once each. Many who dropped one activity had picked up another. For example, they may have dropped hockey but picked up soccer, indicating not necessarily attrition overall, but changes in activity over time. Several studies found that children’s and early adolescents’ interests in physical activity choices changed over time (e.g., Pate et al., 2010). For example, grade eights may prefer more structured and team school activities than they did in grade six, and over high school they may prefer more individual activities (Eime et al., 2013). These students found activities to replace dropped activities, demonstrating their commitment to, value of, and enjoyment in activities. They had enough readily available options in their middle school years to continue being active.

Withdrawal and Subsequent Adequate Physical Activity Participation

Inadequate Vigorous Physical Activity (VPA) and inadequate Moderate Physical Activity (MPA) were clearly associated with not picking up a structured activity (team, league, lessons or club). Among these early adolescents’ reasons for withdrawal were dislike, time, didn’t make the team and dislike of doing an activity at school. The majority of participants did rely on school activities and PHE to accumulate adequate PA. Reasons for dropping an activity varied (friends, injury…). Swimming was sometimes dropped because the participant was finished with a basic set of instructional levels and had not picked it up as a regular leisure or team activity. “When I was little I used to take swimming lessons” (Cleo). That said, the participants had a pool at
school and relished each swim period. The majority stated that they used to play in the playgrounds and now the girls said they hung out, talked, took pictures of one another and the boys played hacky sack or skateboarded, which fits with patterns of an exacerbated gender divide over adolescence.

Socializing and homework absorbed most out of school time; nevertheless, overall, this was a relatively active group who participated in a range of activities, had lives with varied activities and exhibited a balanced life of homework, socializing, screen time, physical activities and other interests. The nature and context of physical activity had changed somewhat in their lives from earlier in childhood, but remained part of their lives and weekly routines. They remained at risk, of course, statistically, of attrition over adolescence. I was interested to know what their own perception was of their likely participation in the future.

**Participation Patterns and Future Plans**

Participants could talk about what they expected to do in the future - which seemed near to them as they were in their last weeks of grade eight and could visualize their summer and their start to high school in a few months. They knew where they would be attending, how they expected to get there, what the school offered, and what they hoped for in extracurricular activity offerings and participation. They expected to continue with current activities and to try new clubs or try out for teams in high school. They anticipated the school would offer a plethora of opportunity. They were optimistic, enthusiastic and dependent/reliant on the institution for these opportunities. These anticipated new opportunities included a chance to do something with which the student had no previous experience, training or even skill. It was an entry point which some of them planned to fully embrace. “There’s a manga club at [the high school] so I want to join that. There’s all kinds of clubs that I want to join. And maybe do some archery.” Have you
ever done archery before? “No, I want to try it” (Chloe). “I’ll be able to join school teams more. I have four years to get on a team. It’s going to happen” (Felix). The participants expected to utilize school-based programming and to continue to rely heavily on school as a source of physical activities. They also counted on, and required, a wide range of choices. The literature repeatedly confirms that variety and choice are important to high school students.

**Physical and Health Education in High School**

High school PHE was perceived as a healthy choice or as an “easy credit” or, sometimes, as a course that would have to be given up to make room for more highly valued academic subjects. They did expect that they would have increased demands on their time and when time became tight PHE would be held up against other academic subjects, and physical activity up against future time constraints. Some already perceived PHE and PA as at risk. Others did intend to carry on. “Yeah, (I will take PHE) until grade ten. And then no time – science and math” (Dawe).

Others expected to give up specific sports. Clay, who intended to continue in aquatics as a lifeguard, loved swimming, had been swimming up to four times a week between PHE and lifeguard certification training, and loved seeing his speed improve, but when asked if he had ever considered joining a team replied “No, because my friend, he’s on one of those and he has to go like four days a week for a few hours and it sounds so horrible and like I dunno, there’s no time for anything.” Raymond had been swimming competitively and said his parents wanted him to continue, but he was considering giving it up:

I don’t know. It’s just kind of boring. … I just don’t like doing all the team stuff. I’d like to do tennis, I’d like to do that, and I’d like to do hockey. I don’t want to do just one sport all my life. I want to change because I don’t want to be good at one thing. I’d like to be just good at everything rather than amazing at swimming because not everybody like,
I’d rather do something that I can do with my friends. Like swimming is racing. I don’t race with my friends.

He wanted to play more tennis and had some opportunity when one of his parents played. “Just go after school… have a couple of people to play with…I’d really like to learn with somebody else. I’d like to play with somebody that’s good. I’d learn a lot more like that.” He thought he would like to take lessons and considered asking his neighbour who was a strong player. His goal was to be no less active, but to have his activities fit together with his interest in more than one sport, and to deliberately develop skill in his current area of interest, beyond playing casually with friends or his parent and his friends. His commitment to activity was high, even though his intention was to leave competitive swimming.

**Lifelong Participation in Physical Activities**

The ultimate goal behind research and discussion around physical activity participation is improved population health and well-being at every stage of the life course. At which point in life are entry points reduced and expectations by beginners and organizations changed to limit the opportunity to learn and try new things? In our culture of childhood as preparation for adulthood, do the doors close upon the arrival of the end of childhood? Lifelong learning has been touted and the growing numbers of adults in continuing education demonstrates a trend toward lifelong learning. But what of physical activity and lifelong learning?

Logan wanted to sustain a specific academic program simultaneously with hockey. He saw it as a challenge to do both and if it were too much, ultimately the academic program would win out. When asked about hockey after high school he replied “No, it stops. There’s no organized leagues in university. There’s 18-30 leagues and stuff and I don’t think I’d play.” Logan’s goals were to carry on with hockey but he could see and map the gradual squeeze on his opportunities for organized sport participation. Rachel had already left organized track and field.
when she did not make her school team. This left her with her only other activity of interest, badminton, which she occasionally played casually with friends, or within school programs. Clay, on the other hand, described his father enthusiastically snowboarding and looked forward to carrying on with it himself indefinitely: “It’s such a fun sport.”

The patterns of participation in this group were overall promising, if still short of ideal. They benefited from school programming, community outdoor facilities, street connectivity and perceived community safety. The participants clearly valued activity, responded with enthusiasm to sports and physical activity opportunities, generally picked up new activities if or when some were dropped, and were very optimistic about school extra-curricular physical activity offerings in high school. Many of them intended to carry on with optional PHE classes although a portion of them thought more academically valued classes (science and math) might displace PHE at some point in their high school career. With that exception, withdrawing from physical activity was not planned upon for a sedentary interest. They wanted more sports, different sports, skill acquisition and level/skill appropriate opportunities, but they wanted to remain engaged and active. Again, their valuing of activity, response to environment, clarity of what they wanted and their willingness to continue unless something interfered with PPA rang through.
Chapter 5: Why They Did What They Did: Influences on Participation in Activity

Numerous elements in the participants’ environment were perceived as relevant to participation by the participants or evidently encouraged or discouraged participation in physical activity. While all environmental and personal aspects could potentially play a role in participation in physical activity, a few are repeatedly investigated in the literature and several of those areas became salient here. One of the survey questions asked the participants to indicate the degree of influence various factors had on their PPA. Discussion of the influence of friends, parents and families, the role of competition, and gender follows.

Factors that Influence Participation in Physical Activity

The students were asked in a questionnaire to identify an activity they did most often. (A wide range of activities were cited including running, walking, soccer, dance, school sports teams, rollerblading etc.) They were then asked to indicate on a scale of 1 “no influence at all” to 5 “total control” (without this factor they could not do this activity) how much they perceived each of 7 factors influenced their participation in the activity. The factors were: family, friends, PHE class, other school activities, recreation centres, private clubs and other. Their combined responses are illustrated in Figure 2. On that day there were 22 students in attendance so the maximum possible score for each source of influence (if all 22 children had indicated it had the greatest influence, i.e. 5) on the activity was 110 (22 x 5). In Figure 2, the bars represent the total score by all the participants for each source of influence, for example 65 for Friends. Comparing the length of the bars allows a judgment of relative influence. If, for example, the participants had given the same score to each factor, the bar lengths would be equal.
**Figure 2**
*Factors That Influenced Participation in a Physical Activity.*

![Bar chart showing influence scores](chart.png)

<table>
<thead>
<tr>
<th>Factors</th>
<th>Influence Score</th>
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<tbody>
<tr>
<td>Family</td>
<td>69</td>
</tr>
<tr>
<td>Friends</td>
<td>65</td>
</tr>
<tr>
<td>Gym Class</td>
<td>57</td>
</tr>
<tr>
<td>Other School Activities</td>
<td>53</td>
</tr>
<tr>
<td>Rec. Centres</td>
<td>45</td>
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<tr>
<td>Private Club</td>
<td>41</td>
</tr>
<tr>
<td>Other</td>
<td>22</td>
</tr>
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*Figure 2. Factors That Influenced Participation in Physical Activity – The scores are the combined participant scores out of a maximum of 100 for each factor.*

Friends and family were identified as the greatest two influences for both boys and girls, followed by gym class and other school activities. This outcome is in keeping with findings in the literature on participation in general of friends and family being typical among significant influences. The latter two, PHE class and other school activities, are both school related and if added together are a bigger influence here than friends or family on the activity done most often. This outcome reflects the amount of time children spend in school rather than a stated preference, so is not surprising.
The data also had some gender differences. The boys’ response was similar to the girls’ on friends and family but the boys indicated greater perceived influence of PHE class and other school activities than did the girls (53 percentage of maximum score vs 45 by the girls). It was interesting that two girls selected family as having total control and two boys selected friends as having total control. In the category of “other”, one participant wrote “Canada” and gave it a 5: total control. These numbers are not based on a large statistical sample but they do contribute to the profile of physical activity for this group of early adolescents. A range of factors contributes to their participation: friends, family, school, recreation centres and private facilities.

The Influence of Parents

The role of parents in children’s and adolescents’ participation in physical activity has been found to be significant by numerous studies discussed in the literature review. In this study, asking, “What role do parents play in participants’ freedom and schedule?” was part of understanding the participants’ use of time and within that, their experiences of physical activity and its relationship to the role of parents. This issue is especially interesting as the participants were at the end of childhood and beginning of adolescence and their independence, freedom, responsibilities and decision-making levels were changing. In the literature parents held a significant influence over participation. All but two of the participants in this study rated family as having some to significant influence in their participation in physical activities. The participants expressed of the role of their parents as it came up in focus groups and interviews. Parental supervision and control, changes in freedom and responsibility over time, safety concerns related to independent travel, trust, modeling and logistics support are discussed.

Parental direct supervision of children’s activities and parental control over the participants’ time was part of consideration of parental influence. Degrees of supervision by
parents over children for the intended purpose of child safety may also mean increased parental control over how early adolescents spend their time, the extent to which they are free to move about independently in their neighbourhood or city and what activities they engage in, with whom, where and at what time. In this study I found that most of the participants reported being permitted to travel in their neighbourhood and use the public transit system to some extent, or walk or ride a bike without parent supervision. They were responsible for letting their parents know their whereabouts, but parents did not escort them to everything. The participants’ freedom and unsupervised time paralleled that of their predecessors in the 1996 study. They had some loosely supervised free time before grade seven and would go home with friends after school or play in a group at the playground. They would ask for parental help “when we wanted to cook ‘n’ stuff” and after grade six their range of independent unsupervised travel and activities increased markedly.

With grade seven, the children were permitted considerably more unsupervised travel in the neighbourhood and beyond. “It has changed a lot because before like I couldn’t really go to my friend’s house after school but now I can… ” (Sophie). Parents had not relinquished all control; the participants still required permission for specific non-routine outings and they negotiated the boundaries of how much permission was required for what kind of events, and what kind of events were even suitable for proposal. “I’m allowed to go pretty far. I go to choir and it’s across the city. My parents bought me (a cell phone) so I could call them when I got (there) and tell them when I was leaving” (Izzy). Going to the nearest mall with friends was usually allowed with instance-by-instance permission and not with the complete freedom some of the children would have liked. Going to the major mall, two subway trains away, was less often permitted.
That’s something I have to persuade my mom. Going to the movies with your friends and going to the mall ‘n’ stuff is a big thing now and I go with my friends but mostly it’s around here. Sometimes when it’s like going on the subway and going to the mall or something, my mom’s like ‘you can’t go to the mall with your friends, you have to go with me or something’. (Chloe)

Generally there was much more freedom to travel the neighbourhood and beyond. How much beyond was under varying degrees of negotiation:

Ling: If I beg them enough they’ll let me (go to the mall with friends).

AG: *So you can’t just go from school?*

Ling: No, I have to call them to make sure they know where I’m going.

AG: *Can you walk down the road to a friend’s house?*

Ling: Oh yeah, but to go in I have to tell them.

Child safety was a concern that both the children and the parents approached with caution and a direction toward increased freedom and independence for the child. In the following example concerns and travel to and from a karate class was not initiated by the parent but by the children. And though the trip was deemed worrisome and intimidating, the child deemed it necessary to overcome the fear, rather than to inhibit the choice in activities or consider a larger picture of public safety. The literature repeatedly lists perception of safety as a factor in adolescent activity levels in urban areas (e.g., Mecredy et al., 2011; Ries et al., 2011).

Before we used to have a problem, because I did karate in the winter and it got dark and me and my sister were like ‘ooo’. And further down … where all the bars are or something and me and my sister we’re used to not, like, doing it in the dark. But now I learned to because I had to walk home in the dark when I started babysitting and that’s like, it’s a thing you overcome. (Chloe)

Ling played on numerous schools sports teams and had the freedom to visit friends after school, so long as she told her parents, but parental concern over safety restricted her access to early morning school sports.
They are really protective, they are just worried... there was also the swim team but I couldn’t go because it was too early in the morning... ’Cause my parents were busy, they had to leave quite early, they didn’t want me to go so I couldn’t go. They just feel safer that I go there regularly at my regular time. (Ling)

The notion of parental trust ran repeatedly through their comments. The participants’ assumed permission and freedom was solely about their parents’ confidence in their own behaviors and decision-making while without parental or school supervision. “[My parents] trust me on the subway and I’m pretty good with that” (Izzy).

Now that I’m older I get like more freedom so my parents let me go out more. Like in grade six I would have to go straight home after school. And now they like trust me with more things, they like give me more options to do things. (Chloe)

They understood that trust to be something that had increased since grade six when they were younger. “Well, like our parents didn’t trust us and we didn’t have as many privileges as we do now. …I think there’s a lot more trust.” (Izzy) They spoke about an increase in freedom to independently choose how to spend their afternoon time “even if I have homework” (Sophie) and “before we had to ask and now we can just say ‘my friend is coming over’”. They generally enjoyed this freedom and sometimes wanted even more, but there was also doubt among one or two participants. “My parents trust me. I don’t know why. I don’t really deserve their trust (sheepishly)” (Brian). Parents might also give their more independent older children responsibilities. Most of the participants did not have many responsibilities but a couple of them had to look after younger children after school, one had a job and one noted an increase in household chores. “I have to pick up my sister every single day after school so I just don’t have time for that stuff” said Ian, referring to after school leisure time with friends.

Parental modeling is in the literature as one of the ways parents positively influence children’s PAP. Some of the participants referred to their parents doing sports (baseball, golfing,
tennis, camping) with them and they felt very positive about this. Others cited their parents’ limited time to be involved or knew their parents used to engage in a specific sport but no longer played: “not now so much because they are really busy. But when they were my age yeah, my dad did swimming, hockey. And my mom, I dunno, she played badminton or tennis or something with a racquet.” (Chloe)

As discussed in the literature, parental support via logistics, in particular driving, could be a significant factor to participation. Many of these children received drives from parents to activities without which they could not participate. Baseball (rep level), swimming, skiing, karate and hockey were supported by parent transport. Clay felt he likely could not ski or snowboard without his parents’ driving. “Outside of school I used to do swimming. Oh, I do karate on Thursdays… it’s a long way so my parents drive me” (Sarah). Nalin noted the effort her parents put in to support her involvement in school sports. She also saw that as they permitted her independent transport they would be relieved of that effort.

Nalin: I live far away from here so they have to drive me …And during my games for volleyball and stuff they pick me up and they drop me off which was a big hassle for them. They are just like ‘if you want to do it then we’ll make the sacrifice.’ It’s a big thing that I’m going to (X) high school because the TTC line goes straight to my house so I can take the subway.

AG: They didn’t want you taking the subway this year?

Nalin: No…they are just a little overprotective.

Others, too, recognized being driven as a privilege: “…parents have cars so we’re spoiled and we’re driven” (Joanna). Joanna observed car ownership was not to be assumed as a universal privilege.

Parental support also included sports-focused holidays and even just getting the child out and being with them while they did their sport. “My mum does running. My dad did a lot of
running and biking…. My grandpa (introduced me to golf). He got me a club and I just used it a lot. It was fun” (Logan). Many really enjoyed participating with their parents (skiing, golf, baseball, tennis, camping etc.) and none mentioned disliking being active with family. Dora and her mother “usually go outside for a walk or go rollerblading…she just walks. She chases after me”. And parents were sometimes the sole sports context:

Jennifer: My dad likes to play baseball with me. My grandpa plays basketball with me sometimes.

AG: On your free time?

Jennifer: Yeah

AG: Have you ever thought of playing anywhere else?

Jennifer: Not really

Parents were also depended upon for other sports related logistics such as registration. Joanna missed this summer’s soccer sign up. “Well, I just ask my parents and then they just look into it … but it was already too late because it starts in June - but we missed by a lot.”

The participants’ descriptions of family involvement often held an element of happiness, which suggests a positive relationship with parents and participation. The stories of a father’s wild skiing, parents in running races, and fun family camping or sports were heartening. Not all participants raised them, but no participants mentioned negative experiences of parental involvement. These positive experiences and messages can have significant impact on ongoing participation. These early adolescents’ daily fitness activities, however, occurred much more often at the school and daily routine levels than in the family events or outings. They were not overly restrained in their use of time or freedom to make choices after school and the majority did not report daily parental driving. They recognized their parents’ supporting roles. They needed their parents for registration, driving, and very likely financing of more expensive sports.
Their parents were sometimes described as busy but any time spent in sports with their children was spoken of with fondness. The participants demonstrated, again, that they valued being active and especially with family when it was experienced, knew what they liked, and that environment, including social factors, strongly influenced participation and experience.

The participants’ reports of their activities and actions outside of structured school time did not reflect high levels of adult supervision, structure, adult observation, or parental driving to and from school. Their reports did not reflect “helicopter parenting”. As with previous studies, parental support was key for many out-of-school activities; not all participation, however, depended on parental logistical support, as these participants had substantial independence in their neighbourhood. They had permission to travel, visit, use the public transit system, use the neighbourhood facilities and with planning, travel with friends into other areas of the city. It is possible the close availability of things to do within walking or biking distance (community centres, parks, friends’ homes, stores, tennis courts, pools etc.) and the public transit system influenced this freedom. A suburban or rural environment may not have provided so much in close proximity. A potential question might be: is there an urban mindset, as well as the advantages of the residential urban built environment, that influence parenting decisions around freedom?

**Community Centres**

Participants held a range of perceptions of the local public community centres, which are run by the city’s parks and recreation department. There were two main centres with easy access to the school area. The students were all aware of at least one of them and many had learned to swim in the instructional programs there. A few participants used the centres for sports, chess or homework club. Most did not use the centres, some said they were really fun, and a few believed
that they were likely to be dull, unpleasant or not cool places. “I’ve never been to a community centre but I hear they have lots of stuff. I don’t think it’s really their program, it’s just their image” (Nalin). Those that did use and enjoy the centres were asked if others went and why or why not and they thought that time or disinterest might explain why only some of their schoolmates went. Some of these results can likely be explained by the fact that one of the local centres held a swimming program primarily geared for young beginners, and the other was further away, on a busy main road, and did, indeed, border a rougher area. Participants did use their more nearby parks for hacky sack, skateboarding, tennis or ball hockey. Public facilities have been found to be correlated with participation when perception of availability of public facilities was adequate (Ries et al., 2011) and the presence of major urban parks has also been associated with higher participation (Boone-Heinonen et al., 2010). Perception of safety trumped facilities, parks and private recreational facility usage in several studies.

Friends - Supporters and Not Deterrents of Participation

Friendship itself was always important in the participants’ lives. The transcripts are sprinkled with references to friends regardless of the topic of discussion. Friends were engaged with for casual play in the park after school, for shopping to have close ties and sleepovers and in one case to carry on with after a family move and be “pretty much like family.” New friends, old friends, current friends, friends within school or other structures, and friends outside of structures were a major factor in most of the participants’ daily and weekly routines.

Free unstructured time was often spent with friends, and in the absence of plans for summer weeks “hanging out with friends” was the inevitable likelihood. Friends made in grade seven, in the first year of middle school, were referred to frequently as the new timetable in grade
eight meant that lunches or PHE class may or may not include access to time with them and non-matching schedules were lamented.

AG:       *That remedial period at the end of the day, what’s that for?*

Brian:    Oh it’s so horrible. We didn’t have it last year and it was so much better last year. We had six periods. And everybody had the same lunch.

Felix:    Sometimes you never see your friends.

Brian:    The other class has the exact opposite lunch and there are a bunch of our friends in there and it sucks.

The opportunity to “meet new people” or “make new friends” was cited as a bonus to any activity or organization and was raised frequently. The participants seemed very mindful of this feature as an important factor to their involvement within and out of school activities and to their high school future. This possibility of making new friends was mentioned more frequently, but with less emotional intensity, than the value or problem of mismatched lunches or seeing less of current friends. Current friendships were highly valued, future friendships were positively anticipated.

Izzy:     I was in our school play and stuff. I loved it. It was so fun. I made so many new friends through that. It was really good.

AG:       *What do you like best about volleyball and track?*

Dora:     I like being with other people, having friends, making new friends.

The importance of friends in encouraging participation in activities fell across a spectrum from a reason to attend an activity at all, to unrelated to the participant’s involvement and commitment to the activity. When asked what he’d do if his friends stopped playing hacky sack Brian replied “I’d go on to the next social thing.” Jennifer stated she would persist with rugby house leagues mainly to be with her friends: *The rugby house league: how was that?* “It’s OK,
like you have to run a lot and stuff. It just started recently.” *Do you like the sport?* “Not really.”

*Would you do it again?* “Yeah - being with my friends.”

Sarah: I don’t want to go by myself.

AG: *Would you go with friends?*

Sarah: Yeah, sometimes.

The presence of friends increased the likelihood of a participant trying or retaining an activity, but passion was a more powerful factor. If the participant truly disliked or hated a sport they would not continue with it even if their friends were playing. If the participant loved the sport or activity, they would persist with it with enthusiasm whether or not any friends were involved. Passion, the connection of one’s interest, identity, affection and drive to an activity, was the key factor and outlasted other factors.

AG: *If you didn’t have friends on the team would you still play?*

Cassie: “Yeah.”

Jennifer’s favourite sport was badminton “because I like to hit things. I can get out all my anger and frustration when I’m playing and it leaves me calm and not angry.” She said she would continue to play even if her friends didn’t. “I just love doing it.” Others talked about enjoying school teams but playing house leagues in order to also play with friends. Brian enjoyed skateboarding with friends “It’s social. Most of my friends do it.” But when asked if he would play golf if his friends were playing, he replied: “Not”.

The participants were not averse to referring to dislike of peers as well. There seemed no compunction to like everybody or get along with everybody. They mentioned having to be with students they didn’t like as a negative feature to the new PHE organization. They resented the
forced exposure in an interactive class. Groupings with friends did not come up in mention of academic subjects.

In addition to enhancing sports experiences friends sometimes were the initiators of sports involvement and in one case a student attributed concrete skill development to a friend’s influence.

AG: *How did you learn to skate?*

Rachel: Oh we went on a school field trip in grade six where we went skating once or twice for a month or two and I thought it was really fun and the year before that we went skating at Nathan Phillip Square and I rented skates and I thought it was really fun. Afterwards, this year, I went with my friend, Ling, and she taught me more. I improved a lot over the past two years.

Rachel was largely uninvolved in physical activities with the exception of occasional family trips to the local outdoor swimming pool. She didn’t consider herself sporty and identified enthusiastically with her academic interests and clubs. The example above illustrates the complexity of influences on sport involvement. The school trips were a key first exposure to ice-skating. Rachel had a positive experience and went out for more, learning from her friend. This particular friend was very involved in sports and Rachel liked to spend time with Ling. Rachel was pleased with her skill development. It seems likely, given her other interview answers regarding community and school activities, that she was more likely to learn from her peer, because she would seek ways to spend time with her peer, than to enroll in a formal program. Public rinks abound in Toronto but very few rent ice skates. The school, public facilities, and friendship came together to enrich Rachel’s experience and resulted in a positive association with an accessible winter sport.

To summarize, friends were a support and not a deterrent to participation in physical activity; however, if a sport captured the passion of the participant they would persist with the
activity regardless of the presence of friends. Opportunities for making new friends were repeatedly mentioned as a desirable thing and this possibility or the chance to be with existing friends was often enough to keep a participant active unless they strongly disliked the activity itself.

Friendship development often occurred in organized school times and friendship maintenance was also influenced by school structures. This interaction is another example of the way in which the children’s lives were subjected to structure and powers beyond their control. Their choice of activities within the structured offerings allowed them some influence over their activities and social time, for example through house leagues. The structures over their lives were apparent and straightforward while the influences over physical activity participation were more complex.

Friendship opportunities are worth noting as a facilitating factor and positive influence from a programming perspective. Within the literature barriers to participation include not having enough opportunity in sports to meet friends (Stuart, 2003) and not having enough friends nearby that also participate (Dwyer et al., 2006). Programming that supports positive social interaction will be superior in attracting and maintaining the interest of participants.

The participants’ passion and commitment to a given sport or activity, regardless of the added benefit of friends, further illustrates that they valued activity and knew what they want. Their opportunities drawn from social and physical environmental influences for physical activity participation were layered by the friendship factor only as a positive element.

The Influence of Competition

The influence of competition in the participants’ experiences of physical activities came up throughout the interviews and its presence, absence or degree was sometimes reported as a
negative, detracting factor, and other times as a positive, enhancing or motivating factor or influence. “Competition” or “competiveness” usually referred to the degree to which the expectation, focus or pressure to win was experienced, and sometimes to the level of skill expectations or the seriousness of the environment. Physical activity can take place, of course, with or without any element of competition. Cooperative or individual pursuits can be executed without winning and losing as factors of play. Competition in which play includes keeping score or times, and where the objective of the game or sport is to arrive at a winner (and loser) dominates most structured, formal physical activities. The participants’ thoughts and feelings on the role, experience of, or opinion of competition as a factor in physical activity was not a specific question in the study. Participants raised their own opinions in a variety of discussion areas including extra-curricular house leagues, school sports teams, Daily Physical Activity (the Government of Ontario newly mandated in-school program, DPA), out-of-school formally organized and unstructured social activities.

As a group, the participants were ambivalent about the merits of competition. It was found in this study to deter and to encourage participation and quality of experience. Competition, formal elimination as well as competitive performance-oriented atmosphere has been considered in the literature as a factor in the gradual weeding out of athletes as they progress through childhood and adolescence toward increasingly elite, alias competitive, ranks within their sport. The pressure of competition can inspire effort and dedication, and reward perseverance and talent. The very design, however, of youth athlete development and feeder systems in competitive sport demands elimination of participants in order to ‘let the cream rise to the top.’ The pressures, and the message that participants must be ‘competitive’ - must be skilled and high performing enough to withstand elimination processes or be discarded - does not in
itself promote participation, rather, a winner-takes-all and losers-go-home result. Participation, lifelong engagement and the health and social benefits of participation may not enter this equation.

Feelings about the merits or detriments of a competitive atmosphere seem to vary among individuals. Some people relish competitive opportunities while others skirt them whenever possible. Still others value them under specific circumstances or when they are associated with only specific activities: those within which they feel most competent. Nobody in this study spoke of losing as a positive experience. It is a basic human need to feel adequate and competent, at least some of the time. Competition then, is a catalyst, an ingredient, which can encourage or discourage play and enhance or detract from quality of experience, depending on its use. Dawe, when asked about what he enjoyed most in his baseball participation replied “Yeah, cause we’re a good team. We are city champs.” *It’s about winning?* “Yeah.” In a discussion of their after school activities “We won house leagues” (Cassie). “We won soccer baseball” (Ling) was a first comment after being asked if their school had house leagues. While Joanna left the volleyball team because of competitive pressure: “I actually kind of quit one team `cause the coach seemed it was more about winning.”

The motivational factor of winning can only exist with the presence of the consequence of losing. The selection of a team equipped for winning can only be balanced with the consequence of the practice of excluding participants who demonstrated their interest and willingness to play by attending a tryout. School non-house-league teams in this school were all created from a tryout process. Students decided for themselves if they wanted to try out. This required that they have the confidence to expose themselves to the selection process. They had to be prepared to pit themselves against their peers, be evaluated by all present, and accept the
decision of school staff of their merit and promise as a team member. The creation of a select team benefits the chosen athletes by allowing them to develop team skills among similarly skilled players and then to experience the highest level to which they can competitively reach. The consequence is that, if the school offers no other team opportunities, the rest of the entire student body is effectively shut out of participation. So in a school of 500 students, 15 or 20 girls and boys will experience team building, skills practice and competition in a given sport. A high school of 1,500 to 2,000 to students will still only offer the team inter-school competitive experience to one team per sport with a possible second string.

Nalin: Well, I was in the house leagues for soccer-baseball and we won. And I tried out for some teams but I only made two of them…I was on the volleyball team.

AG: How long have you been playing volleyball?

Nalin: I only joined this year.

AG: Do you think you’ll be playing in high school?

Nalin: Hopefully, if I make it.

Competitive pressure from coaches or institutions can also exist in non-elite, non-feeder systems such as public recreational leagues or school teams.

Pressure to win can be seen as the antithesis of fun by some. Fun is a motivator that is not always cited as necessary or the only reward of participation and effort. Among the many rewards and motivating factors mentioned by participants were feeling accomplished, reaching new goals and discovering one’s abilities. Experience of fun, however, was a frequent consideration, for example, regarding Daily Physical Activity (DPA): “It’s not that fun” (Joanna). Experience of competitive pressure was assessed against the fun factor in this discussion of participation in school teams:

AG: When was it good?
Ling: Sometimes the coaches just want you to win and sometimes they want you to actually have fun.

AG: *What do you feel about the winning?*

Shanasa: Well, they’ll say it’s not about winning but then all of a sudden it’s, ‘you have to win’.

Jasmin: It depends how far the coaches go. Like if they make you really work at it just to win, then that’s not fun.

Shanasa: But if they are like, ‘OK, we can try winning but we can still have fun’ like if they don’t go too far.

Jasmin: Of course it’s going to be fun winning and that, but it’s only junior high, it’s only junior high.

Cassie: Then it also depends on what kind of sport you’re playing. Like if you’re playing soccer and you have girls that are really, really good then you’re going to want to win because you just have those people on your team. But then if it’s just like your schoolmates and everyone’s good but like, then it’s just more for like fun.

It is possible that the fun vs. competition consideration is really about stress. Optimal stress for a motivating experience versus stress and pressure disproportionate to what the participants expected, or could manage, or found the results to be a worthwhile payoff in relation to the pressure. Winning in itself was not cited as offensive (and to some others it was fun itself) – but pressure to win, in an amount deemed excessive, was a detriment to quality of experience.

Gender and competitiveness has been given attention by feminist scholars and here, too, two sides can be seen to the role of competition in activity participation and experience. On the one hand, it has been argued that girls and women have traditionally been socialized to see expression of competitiveness as an assertive activity approved of more for boys and men than girls and women. On the other hand, while some girls may enjoy competitive opportunities, sport itself has a history of emphasizing competitiveness and girls often want to participate for fun.
and friendship rather than competition and winning (Lenskyj, 2006). Izzy spoke of this consideration:

House leagues is pretty fun. I think the girls do it more than the guys. I don’t know why but like some of my friends are in it and I just think it’s fun to compete in like a fun way and it’s not like if you lose it’s the end of the world. It’s fun because we were runner up or second place. (Izzy)

The boys also cited competitiveness as a positive and a negative factor. Hackey sack was an extremely popular pastime among the boys. They reported playing outdoors spontaneously in small to large groups at lunchtime and often after school in the park.

Brian: I like sports I just don’t like them in school. We have a game called woopsack (in hackey sack). You make a circle and two people have to hit it a least three times before you catch it …you get a letter… and then when you get four letters, they line up and you have to be whipped at (with the hackey sack ball)…I’ve never lost.

AG: Did you guys make this up?

Brian: I don’t know.

AG: Is it the main game you play?

Brian: Yeah.

AG: How’s the getting whipped at part?

Brian: I don’t know. I’ve never lost.

In this example, the boys had organized themselves into a competitive game without the presence of an institutional system. They created and followed their own agreed-upon rules and the consequence for losing was clear. For Brian, at least, the competitive factor increased the pleasure of the game. He came out a winner and the consequence of losing, it appears, did not include elimination from future participation.
Sometimes sheer joy in play was described mixed together with a social factor and the presence of competition. Brian reported being the winner, and partaking as the perpetrator of the punitive element in “whoop sack” as his greatest pleasure in physical activities. But when asked if his friends stopped playing hacky sack, would he continue on elsewhere, he explained “I’d go on to the next one (social thing).” Felix, too, mixed the social and the competitive when discussing his favourite aspects of soccer: “I like to score. I have six friends in the league. I’m on the team with two of them. It’s great.”

Sport and physical activity do also exist without any association with competiveness as well as within highly structured and constraining competition-oriented institutions. Hiking with friends, riding a bike to the beach, gardening etc. are all activities in which competiveness may have no role. Joining a feeder-system specialized sport club or league may have competiveness as the single only goal. Accessing activities that suit individual preferences is the key. Encouraging participation beyond the bounds of specialized competitive institutions is essential for lifelong participation.

Aside from institutionally driven competiveness another factor is at play: evaluation. Quantitative evaluation is an ever-present factor in school PHE classes. Peer or even public or community evaluation was also very much on the minds of these young participants. Performing, as they saw it, with their bodies, in an observable way exposed them to the eyes and evaluation of any person present. They worried how they appeared to their peers, how their performance compared to their peers, and how they appeared to their teachers.

I like… that’s tough, … tennis, golf, chess….I like chess. I like cards. I like everything. Sometimes I don’t like the track part of it because it’s like, some kids, they train a lot ‘n stuff so they’re really fast so you’re up against other kids and there’s this competition. I like to be accomplished ‘n stuff but I’m not extremely competitive, I don’t feel pressured from other kids watching you but a lot of kids are. Track isn’t my favourite
thing but I’m pretty good at it but I can see how some kids wouldn’t like it because of the pressure to win. (Dana)

Dana’s enthusiasm was only dampened by the threat of feelings of inadequacy and while she was not perfectly clear on whether it was her own feelings about her performance and experience, or concerns over the feelings of her peers (it was likely both), it was clear that her joy in participation was potentially tarnished by the possibility of an accompanying atmosphere of comparison, evaluation and competition. She also expressed concern about being found out to be physically unfit in front of her main academic teacher when that teacher was supervising DPA. Before DPA, their PHE teachers would only observe students’ physical abilities and their academic teachers would deal only in academic subjects: the mind, not the body.

Competition then is a useful, inspiring, motivating factor in many circumstances and for many participants. Some participants were not interested in lower level play when they had the skills to play at a higher, and more competitive level. Dawe preferred his rep. team because it was “more of a challenge” and Dora reported wanting “a competitive opportunity” and disliking house leagues compared to interschool team volleyball “because I wanted the competition”. Others found it took the fun out of play.

Competition in formal play, informal play, mixed with social play, as a key part of a more advanced level of skills play, and as part of social or structured evaluation can be motivating, inspiring, detracting or discouraging. It should, therefore, be considered in context, and with the individual participant in mind. Feeder systems inherently encourage attrition from sport, yet competition can also be a motivator for participation. Participants want to feel challenged (to varying degrees), engaged, and competent, but they do not want to feel embarrassed by lower skill or unwanted evaluation or pressured beyond their chosen level, to focus on winning over social aspects of play (mainly the girls) or the joy of the sport itself. Competition needs to fit
with the needs and interests of the participants. The participants wanted to play (valued activity),
were impacted by environment (degree of match in level of competitiveness expected by
themselves and others), knew what they wanted, and articulated what they needed.

**How They Felt About Their Participation**

Up to this point, I have addressed the first two sub-questions of the research question:
what they did and why they did those activities. This section focuses on the third sub-question:
how they felt about it.

Throughout the data runs evidence that the participants valued activity and being active.
They saw it as a positive thing in their lives and expressed commitment to it as part of their
identity and intention to carry on with it. They had successfully moved from the spontaneous
play of childhood to the more structured and conscious play of early adolescence without losing a
sense of connection to sport and physical activities. They liked the feeling of being active, the
break from deskwork, scoring, the sense of accomplishment, the stimulation of new activities and
the exhilaration of activities, being in their body, skill, and being part of a team. They valued the
release from stress and tension through physical activity.

Some said they would continue on in PHE in high school for the contrast to deskwork.
They had an expectation and reliance on school activities, and interest and enthusiasm, and
perception of it as part of the high school experience.

Yeah, there’s golf teams at (the high school) and hockey teams and an ultimate
team and my brothers doing that. I think I’ll want to do that. I’m sure there’s
other sports I’ll think of doing because they have lots of extra-curricular sports
and stuff like that. (Logan)

Academics, however, were often referred to as a greater priority, and sports and PHE classes
could be seen as competition to academic time, attention and success.
The participants could note intrinsic rewards to physical activity. “I like the speed of running and swimming. I’m pretty fast. The endurance. I like that you have to be mentally as strong as you are physically” (Felix). They often expressed sheer joy and excitement about their activities. “I like everything! Soccer, volleyball, basketball, swimming, like, I’m not very good at tennis but I still like it. Rollerblading” (Joanna).

And they appreciated the social benefits of play. “I have like six friends in the league. I’m on the team with two of them. It’s great” (Joanna). Even the least sports-identified of the group found pleasure in activity: “I’m not a very sports person. The only sport I like is badminton. But I also like track. Sometimes on the weekend I play with friends” (Rachel).

This dissertation examines the experiences of early adolescents in physical activities in search of the crux of participation and attrition. The role of intrinsic experience is a key element in motivation and continuation of play. Engagement is crucial. Understanding not just if or when or where or how children and adolescents are being active, but how they feel when they are doing it and what they think and feel about it, is the pursuit of this thesis. And in so many ways, and contexts, the students were able to tell me. Their inner, most intrinsic experiences were included in their answers and discussions. The joy or connection, or mind-body connection or motivation may even be an ethereal feeling at times, but they could find it, identify it, and speak to it. The data capture their inner connection to physical activity.

These young people really valued many intrinsic, emotional and personal aspects of their experiences of physical activity. They could cite the joy of speeding down a hill on skis, the pleasure in being skilled in team sports and selected for teams in gym class, of finding things in common with others, and frequently of the joy of effort and striving to do one’s best. Accomplishment, adrenaline descriptors (before a race), performing well in front of others,
physical challenge, mental challenge, scoring, representing the school, having the activity in common with others and sharing it, being included and selected for teams, experiencing speed, using or feeling strength, skill, endurance, receiving respect, releasing stress, performing with excellence with disregard for competition, and experiencing joy were all included in their experience.

Yeah, when you finish in like a race. Because I do do the races sometimes and you feel like you did your best. Or to get up into a certain level you have to do a certain time … and I did that and it felt so good. Yeah, just when you really get it and you can do it well. (Raymond)

These intrinsic rewards are difficult to teach, but ideally, programming, facilities and opportunity would create climates and opportunities for them to occur. “It just makes you feel good when you’re doing it… I just love doing it. I don’t really have a reason why” (Jennifer).

A sense of accomplishment was often cited as part of the joy and motivation, reward and benefit of sport involvement. “And it’s also the feeling that you did your best and you tried your hardest” (Nalin). Striving was often part of this. When Logan talked about golf he listed the satisfaction from ongoing effort toward improvement “Get a good score. Stuff like that. You feel pretty accomplished. Makes it worth it. Every year (I get better) - makes it fun. It’s a never-ending sport.” While competition against others was cited as a positive aspect to participation and as a negative aspect or even a barrier, it was sometimes motivation and reward from related effort as well. “Soccer – getting the goal. In track, getting a good time. In soccer-baseball, getting a home run. It’s just the feeling, that boost that you get” (Nalin). Other times the absence of competition brought a sense of joy and freedom. “Yeah, just when you’re playing well and you’re not stressed out about it when, ‘cause I have more fun when it’s not intense goal scoring, you have to win, whatever” (Raymond).
They enjoyed the social aspects of playing with friends or meeting people and also receiving the respect of others.

Ling: It makes me feel special to be representing my school, to be on the team.

Clay: When you get respect on the hill. Like you impress everybody with something. Like you do something nobody has done and they’re all like whooooo! That’s awesome.

And there was the sheer joy of physical movement: “I really like to do skiing in the winter. I think that’s a lot of fun because it’s fast and you zip around” (Ian).

They experienced joy, freedom, empowerment, pride, thrill, self-respect, self-knowledge and belonging in their physical activity experiences. These feelings are intimate, important, crucial to development, sense of self, and sense of community and were key to their engagement with activity. The question of how to create, foster and support circumstances in which those highlights, connections, intrinsic rewards, meaningful moments, and sustainable experiences might hold in its answer how best to support lifelong participation in physical activity.
Chapter 6: Physical and Health Education

Chapter four looked at what the children did with their time overall, how they spent their non-school time, how much of it was active and to what intensity, and indications of life course participation patterns. Chapter five discussed three key influences on participation: parents, friends and competition and how the participants felt about physical activity. The chapter focused on physical activity outside of structured school settings and on global factors that cross settings and influence experiences of physical activity. The children’s time was spent at school more than in any other setting. And it is the school offerings that these participants, as did those in the 1996 study, depended upon more than any other for physical activity. Quantitatively, time-wise, it was the single greatest influence. For many, if not most, young people school is the main source of skill development, fitness, introduction to specific sports, opportunity for participation and structured play, and the main source of their impressions of sport, fitness, and their own identity within sport, physical activity and fitness. The material in chapters six and seven illuminates the participants’ in-school experiences of physical activity in two formal, mandatory in-school settings: Physical and Health Education (PHE) classes, and Daily Physical Activity (DPA). The PHE classes in this school were held on the majority of days on the rotating school schedule and included indoor and outdoor gym, health classes, and pool classes. DPA was held on days in which there was no PHE in order to meet the provincial government’s newly mandated 20-minutes-per-day of physical activity for all grade one to grade eight students. This study set out to listen to and understand the children’s experiences of physical activity. PHE, and especially DPA, generated such strong responses that they have been given their own chapters.
In this material, as in all that has preceded it, the participants made clear that they valued activity, were impacted significantly by their environment, and that they knew what they wanted.

The participants were highly dependent on school offerings for their physical activity opportunities and skill development. Gym class was part of their rotational schedule and included some days in the pool and others in the gym. School space and timetable logistics dominated much of the students’ understanding of what was offered, when, for how long, in what class sizes and the amount of gym space they could access. The observations that these young adolescents valued activity and were highly impacted by their environment were clearly upheld in the arena of the school PHE class. It was also observed that the participants’ activity levels were generally good or present, or poised to occur until something interfered. This group of early adolescents was very critical of their current PHE teachers’ approaches, and praised their previous teachers. They were dissatisfied with numerous aspects of their current year gym classes and yet *this did not diminish their enthusiasm for PHE overall*, their joy at the idea of having PHE more often or their intention to continue on with it beyond the mandatory years (unless it was a repeat experience of that particular year). Their current teachers, class size, course content and facility access impacted their experience tremendously. They could list what would improve classes for them - from specific activities, to just being active for more of the class, to longer classes. They valued skill development, learning, moving, not sitting, competence in their teachers, more time in the pool, more gym space and more activities. Their enthusiasm was present even though their recent experience could have diminished it.

**Value Activity**

The participants’ value of PA was especially underscored by the fact that they issued substantial criticism of their current PHE teachers and classes, complaints about the classes and
teaching were relentless, and critique and analysis of the content, pedagogy and teaching spilled out over the transcripts, yet through all that, they valued activity and still declared a like of PHE in general – just the classes that particular year were the exception. They had no difficulty separating the distractions in the environment (including teacher influences) from their personal relationship to physical activity in school PHE overall.

They generally said they liked PHE. “I really like gym classes” (Ling).

Nalin qualified it:

Phys Ed is fun when we’re actually doing stuff. We played dodge ball and I seriously don’t get what dodge ball is all about. It’s like just trying not to be hit… It’s really no point and we play that most of the time and we barely go outside and our teacher talks for like half an hour about things we’re going to do next year. Really quite boring. I’d rather get up and get active.

Logan explained that they had had excellent PHE teachers the previous year and then something changed this year that he and others were vocal about:

Well, Phys Ed classes, compared to last year, they’re pretty lousy. Last year we had a fantastic two gym teachers with quite a lot of experience and knew exactly what to do and how to get people motivated. And people’s attitudes toward gym were great so they didn’t spend much time actually doing the discipline, which really makes a huge difference because then you can actually get to the physical activity and you’re not stuck on the bench while the person yells at you. Because last year was probably a little more easier to deal with because only two gym classes were in there. This year we have three, which is more than 75 students versus last year it was maybe around 50.

The students consistently voiced their opinions on the quality and characteristics of instructional style. Logan observed teaching skill, impact, motivational factors, time spent issuing disciplinary messages versus teaching content, and suggested that the teachers’ inexperience and the combining of three classes of students, instead of two classes, may have contributed to the problems. Gym class was great, until something got in the way, and then it was not. Many participants commented on these factors: complained of too much time spent being talked at, voiced their value of skill and development, expressed a sense that gym was
‘theirs’ and noted the role that school logistics played in their experiences. Their comments also held a subtext that they had a right to good, qualified instructors, or that that was a standard that ought to be, and that these two teachers were ill-equipped for the role and had failed the students.

When asked what made the previous year so successful Logan described it as follows:

> I dunno. He made us work out ‘n’ stuff; that was pretty fun. Like before every thing we’d do 100 jumping jacks and stuff like that… It’s hard work and it gets you in shape to play the sports and we haven’t been doing that lately… To get you in shape for sports instead of just doing them and injuring yourself. And we took it more seriously, the sports that we did (in gym class) and we paid more attention to them. …We had two gym teachers who worked together amazingly so there was a great synergy.

Alternatively, Dane thought the students were needlessly hard on the boys’ gym teacher that year which lead to discipline and missing an entire unit, but he couldn’t explain why the boys were hard on the teacher. “Gym? Yeah, it’s pretty sweet. A lot of people in our gym class though are like complete dicks to the gym dude so like um we had to skip a unit and a bit of extra time just because he’s always like screaming at everybody.” The girls’ comments concurred with those of the boys:

> Last year was much better cause the teacher was better… this year the teacher just started teaching gym classes and she’s not very good. Like no offense to her, but she’s, she says she’s going to talk to us for a couple of minutes about stuff but then she just drones on and on for twenty minutes wasting our gym class talking about stuff that’s not going to happen for three weeks. So that’s really annoying. (Ling)

Numerous participants complained about repeated talking from the teachers about future units when they just wanted to do the activities with their time. They wanted to be active, but according to these reports, it was being interfered with through the social environmental factor of teaching style and limitations. “Wasting our gym class” said Ling. It is the students’ time to be active, “their gym class” and it was “wasted”, thrown away and misused, by redundant talk and inactive time. They felt ownership, a right to be active, and resented opportunities to be active being taken away.
The students were not, however, deterred from their commitment to PHE as part of their value of activity. When asked if they would take gym every day if they could they said things like “Yes”, “That’d be awesome” and a few said “not our teacher”. When asked if they would take it next year they chorused: “Oh yeah!” and a few qualified it with “not if it’s like this”. They were very enthusiastic about the gym classes held in the school’s swimming pool. These were referred to as “pool”. When asked what they would change in gym class if they could, they had a lot of ideas.

**Know What They Want**

The participants consistently knew what they wanted. They liked PHE and physical activity even when they were highly critical of their current PHE teachers. “It’s really fun” (Sophie). When they were asked what they would prefer or what could make PHE better, they had ready answers including preferred activities, preferred space usage, preferred teachers and, markedly, a desire for improved skill development and fitness benefits. They wanted to get better at sports skills, to become stronger and fitter, and to learn new things in the gym. They liked being outside and wanted that time maximized. They noted that their PHE classes were actually three classes of students divided into a boys’ and a girls’ PHE class so the gym felt crowded. They wanted more gym space (by having a smaller group in the gym and the partition lifted), more pool space, more pool time and health classes or talking to be minimized – especially in good weather.

For these early adolescents, gaining new skills would make PHE classes better.

**AG:** What would it take to make the gym class great?

**Rachel:** If we actually learned how to do more sports techniques and we had more time to practice them.
This theme of appreciating opportunity for skill and/or fitness development recurred throughout responses.

Nalin: In the pool, most of the time they give you free time and I’d rather do stuff than have free time.

Rachel: You don’t learn anything in pool. Like you don’t learn new swimming techniques. They ask like who can do like breast stroke, who can do butterfly and we’re expecting to learn it the next class stuff but they just don’t teach us so whoever knows it, knows it and whoever doesn’t, doesn’t. So usually shallow-enders stay shallow-enders the entire year. And then we miss a lot of pool.

Nalin: We have to share pool [the class] with another class so we get two pool classes and two DPA, which is no fun at all because we don’t learn anything.

Part of their consideration for continuing with PHE in high school was influenced by whether or not the classes would include skill development. “Well, I heard from some of the grade nines that the gym program (at the high school) is really good and they are like stronger and they can like run longer and stuff like that” (Rachel). “But if it’s (PHE) going to be like this year, gym, in (high school) if it’s going to be like that, I wouldn’t take it.” (Nalin)

They did not all enjoy every aspect of PHE or pool classes. Straight running “nobody likes to run” (Cassie) or straight swimming lengths were sometimes met with dislike. But they all liked at least something. “Yeah, pretty much (like PHE). I didn’t like some units, like the football. I didn’t like the rugby. The rugby one was really short though…. I like the volleyball unit. I like the track and field unit. I like the basketball unit” (Nalin). Dana was a competent swimmer but still felt self conscious about peer assessment of her performance in the pool:

Gym and pool – yeah I like them. It depends, like different stuff that they would do I don’t like. Like in pool, I don’t like having to swim laps…I don’t like being put up against so many other people in the class because I’m not a fast swimmer but I can go a really long time but I’m kind of slow. And I don’t really like that because everyone’s like ‘oh you’re practically a lifeguard, how is it like you’re one of the slowest swimmers in the class?’ and I don’t really like that. Same with
gym. If I’m not good at something I get really embarrassed and shy about it. Running, suck at it, laps… I’m not a good runner! (Dana)

Skill or perceived skill, especially as they compared themselves to others, in an activity was sometimes, but not always, associated with preference or enjoyment. When asked about her favourite part of gym or pool Dana replied: “Like soccer, I cannot get into, but basketball I can it’s more kind of physical. I’m tall so I’m really good at it!” Being fast, or expert was enjoyed and feeling inept, last or unskilled was a detractor to the PHE experience. “Cause in a class of like ninety students and you’re running and you’re the last you kind of look really stupid” (Cassie).

Logistics

Logistics played a role in much of the students’ in-school experiences. Their school timetable ran on a complex six-day cycle. Students had a homeroom class and rotated for about half their classes. They often referred to the factors related to scheduling when talking about PHE or PA. They didn’t have influence or control over their schedule. Their time with friends during the school day was determined by whether or not their friends had the same lunchtime slot or class times as they did. These friendships had often been established only the year before in the two-year middle school program but being separated from them was considered a real loss by many of the participants. They also valued their lunchtimes for socializing and would often state their reason for not participating in intramural house leagues was that there wasn’t enough time for the sport and lunch or the sport and time with friends.

The timetable determined when mandatory PHE and DPA physical activity occurred, for how long, and whether they were in the gym or pool. PHE classes were single-sex so typically two homeroom classes were grouped together in the same period and then divided according to gender. When the participants reflected on PHE they frequently mentioned the limits of the
current year’s gym class experience and explained that this year there were three (homeroom) classes, instead of two classes, comprising the two (girls’ and boys’) PHE classes. The gym had to be shared with a mobile wall – half for girls and half for boys, yet there were really 1.5 classes on each side. The pool, change rooms and health classes all were at this 50 per cent extra size. The students found it made the gym, change rooms and pool crowded and some wondered if it impacted the teachers. The logistics of scheduling, space and facility access were interwoven with school experience, physical activity experience, understanding of PA in school and reflection on school PA. Cleo’s comment encapsulates the wish for time with their old classmates, less crowding in the pool, her value of pool activity and wish for more of it: “…And also we used to have pool with other classes and now we don’t and we only get half of the pool class but I’d rather have it with the other classes and have pool 50 per cent more.”

**Active Until It Was Interfered With**

The participation experience for these early adolescents was significantly impacted by their school structures, physical and social environment. They were committed to PA and PHE but had concerns about not receiving efficient use of gym time or space and about the quality of their instruction. Again, physical activity sometimes occurs well until something interferes with it, or, in this case, interferes with the usual facilitated opportunity.

AG: *So if you could change anything in gym class, what would you change?*

Clay: My teachers.

Rachel: So we miss half our pool classes and we get maybe fifteen minutes in the water. And the girls always have to come out of the pool first so that’s even less time. They would have liked pool twice a cycle as they had it the previous year. They wanted more activity, rather than the same amount or less.
Co-ed or Single-Sex PHE Classes

Gender has been found to be a factor in physical activity experiences and sex segregated vs. co-ed classes are a matter for debate in many areas of education. In this school PHE classes were split into single-sex classes. The girls’ and boys’ classes were usually separated with a partition dividing the gym. Occasionally they were mixed. In the 1996 study the participants were disconcerted that the class of the opposite gender were given activities that they themselves were not offered. They found it frustrating and unfair. They also cited unfairness in school teams offered to only one gender. In this study, the question about gender divided versus co-ed classes raised responses more about logistics than curriculum content or issues of equity, and preferences for co-ed or single-sex varied. Nalin’s preference was for “Split apart, because it’s not as much people. I like having the whole gym but it’s really crowdy.” Clay thought otherwise: “Co-ed. We get the whole gym, and yeah, it’s co-ed.” The concept of co-ed was often overcome by continued reflections on the whole experience of the previous year when, presumably, classes were co-ed, and not reflections on the experience of mixed or segregated at all.

Um, I liked it when everybody was together. …the gym was too small, it was just better because there would be more people and you could do more stuff. And it wasn’t as um, well, my teachers, they just aren’t as good so we do like different stuff…(under his breath: the teachers suck)…like one of them likes to do Tae Bo and that crap and that’s just not really fun for us to watch a video. Or she makes us do stretches and stuff like that and our other gym teacher doesn’t really know what he’s doing. (Brian)

Dawe couldn’t decide on a preference because the logistics were, for him (and others), inextricably mixed with the notion of co-ed or non co-ed: “Co-ed was two classes of 50 people now there are three classes of boys and three of girls so I can’t really choose.” The three-class combination was a repeated factor: “I think a co-ed would be more fun but it’s just that we have too many people so if we had two classes instead of three, co-ed.” (Rachel)
School logistics and access to friends came up again in relation to the mixing of classes for PHE: “I like co-ed gym the best ‘cause we get put with our other classes n stuff and co-ed gym is fun” (Cleo). The construction of the PHE class meant that the homeroom class was broken in two. Izzy spoke of the benefit of co-ed being that the girls could spend time with their familiar classmates rather than girls from a class they spent little time with, and not about a different or altered curriculum or physical activity experience. “It’s so much more fun being with them (the guys) and going over and talking with them instead of being with a bunch of girls that you don’t really know. Like we’re from a different class. We’ve gotten to know them but we don’t really know who they are” (Izzy). And for some participants gender as a concept or as an observable difference in class experiences was discussed:

To be honest there’s this kid in my gym class, this guy that I like so that’s probably why I like co-ed gym! I used to always wish it was, like before when I was in elementary school I used to always think it would be so much easier if it was only girls but now they’ve gotten more and more catty as we get older and me and my friends we’re just very laid back about it but I’d rather hang out with the guys most of the time. (Cleo)

Class content/curriculum did not come up often and it seems that the boys’ and girls’ classes might do different activities at different times, but that, overall, they covered the same units. Occasionally there was gender allocation to a specific activity, but there were not complaints about access or fairness as with the earlier study.

Ian: Doesn’t really matter. Like with the boys we were playing like boys’ games like basketball and stuff and the girls we were like skipping on the other end. And sometimes we were doing Health with the boys and they were doing something else.

AG: Would you like to do some of the stuff the girls were doing?

Ian: We get to do the girls’ stuff we just alternate different times.
One other student saw this differently and perceived gender assigned content being available to only one group or the other: “The girls had to do skipping routines while the guys did --- it was so unfair and it was sexist too. And she was like the guys are out doing rugby and the girls are in doing skipping” (Izzy). This was an atypical observation. The students in the 1996 study were very aware of and dissatisfied with differentiated curriculum content and the vast majority of the students in this study did not observe gender-assigned course units. They did, however, as can be seen from these comments, still refer to some activities as “boys’ (rugby) and some as “girls’” (skipping). Generally their frustration was not related to unit activity, but more with crowding and teaching, and co-ed was seen as preferred more often than not because of logistics, with some exceptions such as several comments by the girls that the boys didn’t play fairly or pass fairly to girls during co-ed play.

I like it better both ways sometimes. ‘Cause like, um, sometimes it’s like, it’s when you’re doing something outdoors it’s better co-ed so you can have a variety of people and bigger teams and stuff. But if you’re doing something like kick-ball then it’s better just girls because the boys don’t want to go boys against girls and then they’ll cheat. How do they cheat? They like, steal bases and stuff. (Sophie)

Cassie preferred co-ed despite this issue. She liked the year before when it was co-ed and called it “the good old days”:

You get to be with the guys. I’m like more friends with guys than I am with girls `cause girls just bitch about everything so I’m mostly friends with the guys. And that also works better for certain things that you are playing outside. Like what? Like when we’re playing soccer nobody wants to play with the guys ’cause they just hog the ball and they don’t pass or anything. (Cassie)

Dana covered the joy and the struggles and other converging factors of mixed gender classes:

It depends on the sport. I like co-ed if it’s a sport that I’m really good at because I’m like ‘yeah, that’s right, I took you down!’, kind of thing. Like I wish that our rugby was co-ed but like that sucks because the boys never pass to the girls, right? Like no matter how many times the teachers say that you have to. Like one of the things we used to do in pool was in order to get a point, you have to pass to the
girl at least once, but they never do. But I like it because it’s a challenge, like if I can keep up with them then it’s great but in sports I’m not so good at like say like soccer, I get really embarrassed because it’s like ‘yeah, I suck at soccer that’s the boy I like over there, he sees I suck at soccer kind of thing’.

Dana’s comment and those by some of the other girls suggest that the boys were perceived as having greater skill or agility than the girls and that the girls seeking challenge liked playing in co-ed games. Though sexism or gender discrepancy was scarcely mentioned by this group Dana does say the boys wouldn’t include the girls as they would the boys in game play by avoiding passing to girls even if it was sanctioned by teacher rules. She is also noting the difference in performing in a co-ed environment, at this age, as boys, in this case, may hold special interest and one’s social status or perception could also be at play in a physical performance setting. The perceived level of play, social inclusion or exclusion based on gender, and sexual-social dynamics are all areas of gender articulation and social contestation here.

Clearly co-ed vs. single-sex is a complex experience for these early teens. Sports were less gender-assigned than in the previous study and in earlier literature. There is perhaps real progress in skill and sport offerings to both genders. Brian included skipping as a “girls” sport and basketball as a “boys” sport but readily participated in both. Girls’ participation in sports more traditionally played by boys has changed over the past ten years. For example, in 1996 there were 27,305 girls and women registered in organized ice hockey in Canada, and by 2007 it had risen to 77,461 and 85,624 in 2010 (Hockey Canada, 2014). In my 1996 study a boy was disconcerted that the girls’ class included gymnastics and he had no opportunity to participate, and a girl was indignant that she had been excluded, by teaching staff, from playing on the school football team based on her gender. Girls in that study also reported sexist practices in community centre instruction. Perception of inclusion to a given sport according to gender may have improved by 2007, even if micro-level interaction had not.
When asked if there was one thing they would change in PHE many of the children returned to logistics: smaller classes, access to the whole gym space, and environment, teachers that the students would listen to, and “health should be in winter, not in summer,” air conditioning, and co-ed: “It’s more fun because you get to compete with the guys,” “it’s more fun to be with the girls”. If given the choice of gym activities, the participants listed a range of activities including hacky sack, lacrosse, hockey and “doing whatever we want”.

They would have liked choice, variety, to have a say, input. Their statements are a request for democratic participation. They were on side with the perceived goals of PHE: skill development, fitness and health, and active participation. They felt very strongly about the importance of skilled PHE teachers and attributed the success of their classes for skill development, motivation, student behavior, fun, and good use of time for activity with this factor. They found three homeroom classes of PHE together too crowded in the gym and in the pool. They had an expectation for a meaningful PHE experience. It sounds like they wanted to do their part, they just needed the school to do its part to the level the students knew was possible from their grade seven experience. Their commitment to activity was not altered – they still valued activity. They were impacted by their environment significantly in the PHE experience. Both the facilities and social environment held the most significant influence in their in-school PA experience. They were actively thinking about what they liked and disliked, expected and were disappointed by, what they respected and valued in the experience. They complied with the system but had active agency in their minds as will be seen even more so in the following chapter on Daily Physical Activity (DPA). Within knowing what they wanted, they could be quite specific. Their activity and skill development thrived with suitable environment and opportunity, and was hampered when that facilitation was impeded by resources.
School Structures

School imposed structure onto the children’s lives. It determined what they did, when they did it, for how long, and with whom. Friendships were made within these structured blocks of time and then were stretched across blocks of time when the timetable changed. Experiences of physical activity occurred within the structured, mandated blocks. Fitness, skill and joy were experienced as well as frustration, detachment and discomfort. Length of time to change or shower was squeezed in or absent from the blocks of time. Crowding in the pool or gym because of three classes being taught together was all part of the school scheduling and impacted the students’ experiences and their analysis of the quality of their instructional experiences. House league offerings for optional participation in sports of choice were timed with lunch and many students opted out because of the rushed time. The content within the blocks of time was also structured and not determined by the students. They had strong ideas about what they might like to do but they did not believe they had any influence over it. Their physical activity and fitness time was highly dependent on school PHE. The mandatory structured PHE ensured some degree of activity and skill development and the students liked this experience. They were being equipped with a certain degree of physical literacy. Their acute awareness and analysis of the strengths or weakness of the instructional experience and their value of PA and their own development suggests that much more could be done to ensure consistent, meaningful use of their engagement.

PHE and Lifelong Activity Participation

The question of what elements of these experiences will support lifelong engagement and PPA remains. It is difficult to determine if mandatory externally imposed PA will translate to independently sought out PPA. In the case of other subjects at school, the vast majority of
students will not go on to independently pursue mathematical exercises in their leisure time because it is good for the mind. But they will have mathematical literacy (numeracy) providing them with the skills needed to go on with some areas of study and work. If PHE classes provide basic sports and movement skills and knowledge, is it enough to equip students to go on to be active at school, work or in life? Would it be beneficial to introduce choice-making, program planning input into school PHE, DPA and extracurricular PA? Would linking those activities to community activities, or creating new community activities linked with schools create more realistic lifelong opportunities? Definitely school exposed children to things they discovered they liked and wanted more of: skating, some team sports, and outdoor experiences. How can public health, community recreation and school programs work together for multi-aged PPA opportunities?

“Poor School”

One area that was not anticipated in the study launch was that of perceived socioeconomic status (SES) factors as a point of awareness of the participants. They frequently and repeatedly raised concerns or made comments about the socioeconomic status of the school, the community centre or other schools. Conceptions about money, status, the wealth held by one school versus another, community centres and SES were on the minds of these young people. There was no reference or mention of any of these points by the 1996 group. From repeated statements that their school was a “poor school” to the notion that the public parks and recreation facilities were specifically designed for those of less than average socioeconomic status, money came up as relevant to physical environment, facilities and resultant programming opportunities.

Nalin: Lots of people think community centres are not cool, they are just for people who - To be honest? I used to think that community centres were for, like, poor people…This school’s not very rich.
AG: What does that mean?

Nalin: Well this room! For instance, look at all that paint chipping off. Our pool sucks. We have like, freezing cold water sometimes and warm water. It’s not cool. And we don’t have a lot of money for like sports equipment and stuff ‘cause all you hear is like this kid broke this so you can’t have it any more.

Many of the participants complained that their school pool was frequently closed and repairs took weeks or more. They complained about limited sports equipment. They compared the school to others they had been to that were newer and had extensive fund-raising. More often than not, though, beyond the pool specifically, they couldn’t describe much more than “poor school.”

**Findings and the Literature**

There is support in the literature for the importance of enjoyment of PHE. It has been suggested that enjoyment (Hashim et al., 2008; Liu et al., 2008), self-efficacy (Barr-Anderson et al., 2008; Shen et al., 2007), and a perceived sense of competence (Shen et al., 2007; Wang et al., 2009) influence likelihood of continuation in PHE classes, and even in PA outside of school (Hashim et al., 2008). Most of the studies considering gender noted continued gender privilege disparity in school PHE. The absence of concern over this issue was prominent in this study. The crowded gym overtook much of the students’ thinking on co-ed vs. sex-segregated classes but they were also clear that neither class was privileged or deprived of specific activities or access to space or attitude. Especially girls echo the keenness on PHE expressed by these students more often in studies of children in the K-6 years while research on high school students finds a decline in enrolment in PHE. The participants in my study liked a variety of sports and activities and others found this outcome as well (e.g., Hill & Hannon, 2008; Liu et al., 2008). Liu et al. also found that teachers could influence enjoyment level and attitudes toward PHE classes through “teacher-generated excitement” and activity selection. The students in my study
were acutely aware and articulate about teacher impact on their experiences in PHE class, but did not allow it to influence their position on PHE overall.

**Recommendations**

Based on my findings, recommendations for PHE improvement include: providing adequate physical resources for PHE classes (adequate gym space and teacher – student ratios, maintenance of facilities and equipment, making optimal use of weather, season and indoor and outdoor choices); providing adequate human resources (select or train, prepared teaching staff for PHE); taking consideration of the students themselves (consider student preferences, implement more democratic approaches to teaching such as including students in participation in elements of curriculum design and delivery, opinions and leadership). A more participatory approach to PHE pedagogy could lead to a more participatory approach to lifelong PPA.

**Conclusion**

The students’ comments on their experience of physical activity in their PHE program expressed the themes: they value activity, are significantly impacted by their PA environment, know what they want and are generally active, or want to be, until something interferes with it. The students demonstrated that they have strong independent critical thinking about their PHE classes but that they are subjects of a structure beyond their control. They were passive recipients of a program they actually felt passionate about. They were engaged and keen to participate, but were in no way contributors toward their school structure or curriculum. It is not a participatory system of decision-making. They felt free to think critically, and they felt free to communicate their thoughts with me. But they did not feel empowered beyond that.

Their environment - facilities, scheduling, class sizes, lesson content and pedagogy - determined their experience. Their individual excitement, caring, wanting and value of PPA
intersected with the structure of the school. Their passion met structures over which they had no influence. This was sometimes a collision expressed in the outpouring of opinion and emotion in these interviews about PHE and DPA.

As a listening project, my research was very successful in eliciting and hearing the students’ standpoints and expressions of experience and their thoughts and feelings on PA. A more democratic approach may also help with student engagement and adherence to PHE class. They have insight, they need only be asked, and listened to. Simple changes could be made such as holding health class indoors in poor weather/seasons and outdoor classes in the late spring, or finding out what the students’ preferred sports are – some are not curriculum required (such as dodge ball). The wealth of information within the student experience has nowhere to go and grow. They are entitled to think about but not participate in the curriculum process. Their commitment to physical activity, their recognition of and appreciation of its value adhered, despite their negative impression of their PHE instructors. They expressed a sense of ownership over their enjoyment and value of PA, and of the classes and their right to decent instruction by trained, well-prepared teachers. Again, they valued PA, were intensely impacted by environment (facilities, programming and teaching), knew what they wanted, and wanted activity and chose activity until something interfered with it.
Chapter 7: Daily Physical Activity

In an effort to address rising childhood obesity rates and high levels of inactivity among children, the Ontario government introduced a new initiative in 2005: all elementary school students would engage in 20 minutes a day of moderate to vigorous physical activity. It was called DPA (Daily Physical Activity) and began in schools in the 2006-2007 school year (Government of Ontario, 2005).

…school boards must ensure that all elementary students, including students with special needs, have a minimum of twenty minutes of sustained moderate to vigorous physical activity each school day during instructional time. The goal of daily physical activity is to enable all elementary students to improve or maintain their physical fitness and their overall health and wellness, and to enhance their learning opportunities. (Government of Ontario, 2005)

Schools were obligated to organize the day and weekly timetables so that if an active PHE class was absent, DPA would be programmed into the day. The school in which this study took place held grade seven and eight students and so fell into the elementary grouping and had included DPA in its scheduling for the year. This study included a question on DPA in the qualitative interviews, as the students would now have PHE plus DPA among their structured, mandatory school activities. The participants were asked about DPA “Tell me about DPA,” or, “Do you have DPA?” These questions received an explosion of commentary by the participants. DPA became a favourite topic of discussion and critique. Participants’ comments created an illustration of the DPA policy and practice as these young people experienced it. The participants demonstrated keen reflection on the content, role, purpose and effectiveness of DPA. It proved to be a dynamic arena in which the structure, authority and politics met with children as individual agents living within the implementation of the policy. It also demonstrated that the
participants valued activity, appreciated full gym periods, did not fully understand the logistics or intent of DPA, and had exuberant opinions on what makes effective, meaningful or comfortable physical activity.

Participant response to the first mention of DPA often included strong reactions such as the following:

“DPA!”
“Ahhhh no!”
“It’s a joke!”
“It’s pretty lame.”
“It’s OK.”
“I think it’s awful. It’s not organized. It’s brutal. Twenty minutes won’t make that much of a difference.”
“It doesn’t really do very much.”
“I don’t like DPA”
“Most of the time we just sit in class.”
“I hate it.”

And more moderate comments: “it’s OK”. The conversations and insight reveal a detailed picture of these early adolescents’ experiences and thoughts on DPA.

**Participants’ Experience and Perception of DPA Content**

The students described some callisthenic stations that comprised DPA earlier in the school year. They had no positive comments about that exercise. They found it “boring”, “childish,” or “hard” and two said they were uncomfortable exerting themselves in their regular clothes and in front of their academic teachers. Others described a phase earlier in the year in which the DPA exercise was to follow and copy exercises on a Tae Bo video in their classroom. This, too, was largely met with disdain. It appeared that as the year progressed, and the spring weather arrived, DPA became a gentle walk outside through the neighbourhood. The
participants enjoyed the walk itself, but those who were interested in, and expectant of, greater intensity found it inadequate.

Rachel: We don’t do anything! We go outside and we just walk and sometimes it’s really hot and sometimes people need to catch up on work and before we used to do pretty awkward exercises. It was just a bunch of hopping and childish. More like something you would find in a grade one or two class. So everyone just got so sick of it that we just went and walked. A few times we would go to the gym and play soccer-baseball. But oftentimes the gym is booked or there is a class.

AG: *Tell me about DPA*

Brian: It’s pretty lame. We have to do the stupid exercises or Tae Bo, which is the worst thing ever invented. Why? They bring in a TV and it’s this movie from the eighties. All these guys in spandex and you have to repeat what they’re doing and it’s horrible!

AG: *Did it ever go well?*

Brian: No.

The manufactured activities were not a success. Students did not appreciate or enjoy them. Surprisingly, the students often did not understand the logistics or role of DPA in their schedule. It was designed to be twenty minutes on days that did not have gym or pool. Some students saw DPA as a period like any other class, but were then confused about its short duration and felt that it should be a regular period length.

DPA, uh, to tell you the truth, sometimes my teacher doesn’t. Sometimes we just stay inside and play cards. Other classes, I was just talking to my friend, Sadie, about it, she says that she does like, they do like ultimate Frisbee ‘n stuff. I guess it’s like a fun alternative. It was good in pool like in winter, you didn’t have to wet your hair all the time. (Cleo)

Cleo did not understand that DPA was distinct from pool in its origins in their schedule.

When participants expressed dislike of DPA they were asked what might make it better, or what they would prefer. Here they reveal that they did not dislike being physically active at school, they disliked particular aspects of their experiences of DPA programming. “I don’t like
DPA”, responded Dana. When asked what she would do to improve it she replied, “Not have it. I don’t like doing activities while I’m wearing my regular clothes.” *What about when you just walk outside?* “It’s not that bad because we don’t walk that fast.” Cassie, who did many school sports and prided herself on finding ways to leave classes responded to “*What could make DPA better?*” with a despondent “I don’t know. Just not having it at all.” And Rachel, who loved academics and did not see herself as athletic replied “just….not have it and have pool.”

It is possible that physical activity did not work when it was artificially imposed into another element of culture – in this case school culture. ‘Put down your pens and do 20 minutes of calisthenics’ was possibly in too much contrast to make sense to the mind or the body. Gym and pool classes were part of the students’ school culture and involved skill development and some sense of betterment and they liked the full class time. Participants expressed a preference for a full period of gym or pool. One could hypothesize that for PA to work in people’s lives it must be routinized, habitual, convenient and rewarding. Rewards can include: social time, sense of accomplishment, endorphins from workout (cardio or stretch), mind-body connection including stress reduction, relaxation and peacefulness, competition and winning, games, either competitive or cooperative and fun or even a view from a hike, the texture and sensation from swimming through water, the thrill of tobogganing etc. The DPA was a jarring contrast to the students’ day and routines and to them served no purpose. “I personally would rather go out and do something than just do activities that I kind of found a bit silly” (Logan).

It was not physical activity that disturbed Rachel (above) – it was the seemingly senseless nature of the activities and this response was the same for other participants. Izzy preferred “Going in the back, doing sports” and argued, “Mr. Dima’s class, he played baseball with them. Like that would be so much fun if our teacher did that.”
AG:  *Why do you do DPA?*

Brian:  ‘Cause we have to have at least twenty minutes of activity a day so we stay fit. Which I don’t think is enough time.

Eva:  Well, it’s OK. It’s an excuse to go outside I guess. It’s not that fun.

AG:  *What could make it better?*

Eva:  I don’t really know. It’s too short. We can’t change and it feels gross after. And we should just have equipment…It’s not their fault because the gym isn’t always open. It’s kind of hard to get back on the students and find something to do with them. So I don’t really know what they could do but they should think about it.

The students saw it as a weak, short gym period, as an incomplete and unsuccessful effort at an activity period. Clay: “I just want to go outside and play soccer or just walk around like we used to do but now we don’t and I don’t like that. I like being outside. I like nature. I want to be an environmentalist.” Clay wanted to go outside and throw a football like at recess time, and said about DPA “I like it `cause it takes up class time. It’s a nice break from school.” Sarah thought, “We should just have gym.”

The students wanted DPA to be more like gym class. As shown in previous chapters they spoke passionately about being active and liked many activities and valued activity in itself. They were acutely aware of the times in which they perceive it to have too little density or relevance and when the activities did not match their ideas of value: skill building, continuous enough activity, not too rough, intensive enough etc.

**Participant Understanding of the Intent of DPA**

The participants’ understanding of the logistics of DPA in their schedule varied. Some saw it as another period like any other – only short. Others thought it was open to student performance evaluation like an academic course. And some were mystified why they had to do
deskwork when pool was cancelled and DPA replaced it, but only for part of the period and the rest was deskwork.

I think we should have to do more DPA. If you miss pool class, which is pretty much what our DPA is because you’ll have pool or gym every day so if you have your DPA we go outside, we usually walk down a street and come back and that only takes twenty minutes every time - if we had pool it would take up the whole period - and then we just go played - that kind of stuff. (Logan)

Inquiring directly why they have DPA, the responses varied considerably revealing a range of levels of understanding of DPA came about, how it was intended to fit into their schedule and the purpose of DPA in general, and for them. It also released further opinion on the relevance of DPA to them. The tension between powerful decision-making structures beyond the early adolescents’ range and their own sensibilities about their lives was articulated.

**Participant Comment on the Effectiveness of DPA as a Physical Activity Initiative**

Participants spontaneously included commentary on effectiveness in their consideration of DPA. This study did not set out to evaluate DPA, only to listen to the participants’ experiences of all physical activity in their lives; however, the participants themselves had developed strong evaluative options of DPA and shared them openly. The students raised and commented on their understanding of the goal of DPA - to provide a basic minimum amount of daily physical activity – which was, according to the students’ perceptions, probably not being met in the existing program.

Paul: Most of the time we just like, we have times when we take walks, other times, like at the beginning of the year we did silly exercises ’n stuff but after a while you can kind of tell that the teachers are getting kind of burnt out like having to do the instruction and lead these activities that really, there’s not much that they accomplish by doing it, because it was basically put in by provincial government.

Sarah: I don’t think it’s a very effective plan to fight obesity ’n stuff because we don’t do very much exercise. Because we barely ever do it and we don’t get much exercise, it’s just a light walk. And even in gym class we do less. We got a new gym teacher and we do more talking than actual activity.
Nalin: And sometimes we just stay inside and play cards or watch a movie. It’s like daily physical something.

Jasmin critiqued the whole program: “I think it’s awful. It’s not organized. It’s brutal. Twenty minutes (of slow walking) won’t make that much of a difference.” Jennifer described DPA as “painful” and did not know why she had to do the stations exercises. “It’s always on day three when we have to do the journals we have to do work during our DPA” (Felix).

Participant understanding of the purpose and role of DPA varied and so did their understanding of, and opinion of, their DPA experiences. These early adolescents did not fully grasp the origins, design or intent of DPA although some at some times showed true savvy as seen above. Some made a connection between provincial politics and the presence of DPA in their schedule and understood that a large administrative structure made a decision to create DPA. Among the reasons DPA was implemented that these early adolescents understood was so they would be active for 20 minutes a day; that it was to encourage activity and many stated a connection between notions held by authorities and obesity and the instigation of DPA as a preventive measure. The idea that exercise is good for health and well-being was somewhat present but often lost in their frustration with the external imposition of DPA, their experience of the content of DPA and their ideas about what DPA might really be, or also be, for. Some were clear on the logistics and purpose: “We just have to have daily physical activity for 20 minutes a day so if we don’t have pool or gym we do DPA” (Kamau). “To encourage activity.” (Nalin). This is exactly how DPA was intended in the schedule but few understood that so well.

Felix: I don’t know. I think it’s so a teacher doesn’t have to get another lesson plan going.

Cassie: DPA is stupid. It’s just an excuse for people that can’t go to pool.

Sarah: We received something on the news. To stay healthy and active and I don’t know.
Many of the participants followed their statement with a quick evaluation of the relevance or accuracy of the position of the power body that created DPA.

To do physical activity. It’s really dumb. What’s the point of doing that? We go outside and we walk around the neighbourhood that we did for most of us for our whole entire lives and it’s accomplishing what? Showing us that it’s smoggy outside and we still have to walk for twenty minutes of physical activity. (Cassie)

Even the very active high participators disliked DPA.

Dana: Uh, well apparently we have to have daily physical activity. Why might that be? I don’t know. I think they might be trying to have a healthy school. ‘Our school’s healthy, we have activities every day!’ kind of thing. But then it’s nice having a break. Like last year we had a day where we had gym and right after gym we had pool and that was the best day ever! We had computers, gym, pool, lunch and a double art in the afternoon. That was like the best day! But then there was another day where we didn’t have anything because we had that double period. So I kind of like having a free period but I don’t like DPA.

Sophie: You have to have 15 minutes a day of physical activity and that’s what DPA is. So you won’t get really fat. Is it working? Uh, no. I just don’t think it’s working. For gym we do a lot of boring stuff. Like in gym we don’t get to do fun stuff and in health it takes up time.

DPA did, indeed, originate as the provincial government’s answer to public- and media-stated concern over obesity among children. The student responses to this unstated, yet understood, notion that obesity is seen as a reality or as an imminent threat demonstrated a resistance to the idea that it applied or could apply to them.

AG: What are the reasons for DPA?

Izzy: We’re not that fat

Felix: To stay healthy

Izzy: That’s so you won’t get fat!

AG: What is the purpose of DPA?
Eva: Well, see, like now I think more kids are gaining weight and getting unhealthy ’cause now we’re having it easier. We get more electronics and more fast food. … because some kids actually do need it. And it will make a difference. I can’t really think of my classmates like that. I think that the majority of kids it could make a difference for some kids, but the majority like my class, I don’t think so.

In fact, these students did not appear to be overweight.

They could see that they were influenced by policy elsewhere (structure) and that they had been grouped among “kids” in a broader sense – children as a category. Sociology of childhood addresses this question – the pros and cons of seeing children as a group or class. Children are constructed as a group, which can render them uniform objects. As a group they can also be understood as a class, and a subordinate class, which can be useful in understanding power and children as a group. The theory also points out that too often children are seen as incompetent or incapable. A paternalistic approach may see the adult class as having responsibility for looking after and looking out for the welfare of children, but to do so with no regard for their own capacity to contribute to the designs imposed upon them speaks to an assumption that children are incapable, powerless, and ought to be.

Clay: Because they think we’re fat kids.

Rachel: Because the government wants to appear to be doing something about childhood obesity. And is it working? I don’t think so because the activity we do – I don’t think it’s enough to fight childhood obesity. Lots of people (at this school) are very into sports and they do activity on their own.

Clay described one friend he felt was overweight and spoke with sympathy about the friend’s diabetes. Eva understood it to be about fitness and health and to be beyond weight.

It’s not about weight. It’s about being healthy and about being on top of your game. ’Cause I know someone who has cancer and she never had a problem but she’s trying to change her diet more. She’s already a raw vegan but she needs to do something else because there’s obviously something wrong and she needs to look at the foods that are better for her body. (Eva)
The story of her friend illustrates a perspective that if one is ill one can and should do something to improve their health on an individual level and a belief that the individual bears responsibility for their health and illness. This is a point for future consideration – if health promotion and education place the responsibility of illness and health on the individual, do individuals then feel that their, or others’ actions, are solely accountable to health outcomes? At what point does that degree of accountability get relief or release?

If the early adolescents feel that as a group they have been labeled as obese or at risk of obesity, what are the consequences? Moreover, how is attention drawn to something without creating a labeling process or a deterministic phenomenon?

These participants differentiated themselves from the label and diagnosis and also from DPA. It was an act of independent thinking and agency. To what degree does the public education permeate in a positive way? In a negative way? To what degree is it cancelled by self-empowerment?

**DPA in the Multi-faceted Reality of Early Adolescents’ Lives**

These students resisted the notion that they receive too little physical activity, that they suffer from obesity or that obesity is a near and viable threat. They instantly identified themselves as active and believed that, while they were subjected to the DPA mandate, it surely must be meant for other kids, somewhere else. Clay’s response sums up their perspective nicely:

AG: *Why do you have DPA?*

Clay: Because, apparently, by the Ontario Board of Education or something, we need to have at least twenty minutes of physical activity a day. I mean like who actually doesn’t? – But, whatever. I mean even walking to school. It takes eighty minutes a day walking to and back from school so there, I’m done. And then everything else I do, I definitely get that like I mean I don’t know who doesn’t get that.
This quotation is acutely poignant. Clay was saying just about everything the participants expressed and it encapsulates the quantitative and survey data as well. The apex of the results of this study is embodied in this: The first sentence demonstrates that Clay understood that there is a large administrative structure that determined that children, himself included, require precisely twenty minutes a day of physical activity. He knew it was a decision from a higher authority that determined a policy that directed his daily, hourly, by-the-minute experience on this activity. He also demonstrated some cynicism in his tone and word choice. He did not completely buy into (accept) the authoritative body having total legitimate authority. He also had the name of the administrative organization half right and half wrong. The Ontario Provincial Government initiated the policy and the school boards were obligated to carry it out in their schools. Clay’s school is within the Toronto District School Board. Clay captured the general direction from which the directive came but did not quite know the organizational divisions.

Clay then went on to question the relevance of the policy by pointing out that based on his own experience and observation, the said goal of the policy is redundant because “…who doesn’t get that…” but then demonstrated submission to the nature of being a recipient of higher directives and a willingness to comply, if only with expressed reluctance “…but whatever.” He then supported his observation with examples of daily twenty minute, or more, activities such as walking to school. And there he hit the nail on the head. It is the simplest, most accessible form of daily activity and he saw it as a habitual, guaranteed, inevitable reality in the lives of those he knew. On top of his 80 minutes of walking he did leisure activities and gym class and pool class. The policy made little practical sense to him.

Clay was a fortunate person. His life was very well designed to incorporate daily activity; the question of whether or not it will remain well designed is the key. In grade nine his DPA
requirement will vanish. Soon after, PHE will be optional. Hacky sack at lunchtime and after school, skateboarding, family snowboarding and daily walking to school may not survive his post-secondary years. His career, residential and leisure decisions will be better determinants of his continuation of physical activity. He may or may not realize this now or even later. The seemingly redundant mandatory twenty minutes a day from the government now will be more necessary than ever when he is no longer a child and has fewer means to activity throughout his day.

DPA was entrenched in the forces of institutional school life, life as a child/adolescent and life in a body in a largely mind-focused education system. Dana, for example, understood that a power beyond her was insisting on DPA but she disliked DPA intensely. She went on, however, to describe with enthusiasm a “best day” that was populated with physical activity. It was not activity itself she despised, it was DPA in particular. She saw art, pool, gym, computers and DPA as a valued “break.” DPA was not a proper gym class but activity to be done “in regular clothes” and while it was perceived by Dana as a “free period” – presumably free from deskwork, it was detested and its origin, purpose and value were not understood at all. Since Dana loves her other physical activity classes, it would be hard to explain that a walk outside is imperative physical activity designed to place a protective barrier between her and obesity. Ling: “They say that at this age people, all they care about is MSN and the computer games and they don’t do much activity.” Do you think that’s an accurate assessment? “Yeah, that’s true for some people but other people I find are quite active and do a lot of sports and physical activities.”

From the perspective on an intervention initiative, this was not a report of a successful program to increase activity, nor the invitation to lifelong enjoyment and future intrinsically motivated participation. The students did not actually receive 20 minutes of MVPA exercise.
They did not know why they were doing it, saw it as an oddity in their schedule, found the activities disjointed and without resonance for them. At best DPA was reported as “a break” or “time off” and at worst “a joke” and “better not to have it at all.” The presence of DPA in the school did, at least, seem to deliver or concur with the message that fitness ought to be considered and ought to matter.

In summary, the participants understood that DPA was implemented in a response to a belief that children are “fat”, that they were not fat or inactive themselves, that DPA activities were highly undesirable, that a break from deskwork is good, that longer sessions of physical activity are better, that proper gym or pool classes allow for full engagement and a change of clothes, that DPA came from a government policy about other fat, inactive kids and that the problem didn’t really relate to them, and that DPA was imposed but even the teachers weren’t fully able to make it work.

The interviews demonstrated that the children were analytical, outspoken, accurate in their assessment of their weight and fitness levels versus the perceived norms (they are more active), that they do like physical activity, in spite of being completely turned off DPA, that they are happy to move, they like and want more gym and pool classes, want to be able to change their clothes, sympathize with their teacher’s perceived ill-fit with DPA, were not clear on how DPA was supposed to work in their schedule or in fitness development, were compliant with things that seemed very silly, annoying, insulting, painful or futile, but retained their ability to see it and say it. Their bodies did the DPA as their school programming required it; their minds remained autonomously active, critical and aware. Their commitment to physical activities to which they did identify remained undeterred. Those elements: analytical awareness, confidence in their opinions, and their personal commitment that activity classes (pool and gym) and activity
in general have merit and worth and can be, and usually are, enjoyable and desirable are important here. The children are agents of their minds and, when they can be, agents of their bodies. Despite the structural, real forces of a (well intended) program’s influence to, quite possibly, inadvertently produce the opposite effect.

**DPA as an Intervention**

The purpose of this study was to hear and consider the subjective and expressed experiences of physical activity of these thirteen- and fourteen-year olds. It is beyond the scope or focus of this study to give an independent assessment of DPA. The data offers a rich profile of one aspect of the DPA venture. Sociology of childhood work is never completely cleaved from relevance to activism and consideration of child rights and health. DPA was launched to implement twenty minutes of mandatory moderate to vigorous physical activity per day. An elevated heart rate for twenty sustained minutes brings health and fitness advantages. The actual reality of the policy in this sample was quite different and there was no parallel between the goals and criteria of DPA and the lived activity in this particular school setting. There are many potential reasons for this: the policy was new, the teachers were inexperienced with the practice of DPA, and, as with any new intervention, there will be a learning curve. The experience of these students with one teacher and DPA may not be the same as others. The comments and insight of these participants do, however, provide rich fodder for policy design, implementation and assessment.

The teacher guide for DPA offered many potentially successful activities. What is the flow between policy and practice? Where are there breakdowns in information, intention, skill and support for successful implementation? What are the incentives for school personnel to implement a thorough effort at successful, responsive new programming? What is the
information feedback system for interim evaluation of the success of the communication, training, support and execution of new programming? Where does accountability lie? How are changes proposed, supported and activated to further the success of the goal or intention of a program? The idea of moderate to vigorous physical activity for twenty minutes a day is excellent. How is it to be made into a reality?

The literature includes interventions and intervention assessments on adherence to exercise regimes and on the success of measured levels of fitness. The subjective experiences of the participants are not the focus of these efforts. The goal of most interventions is to increase the independent activity levels of select participants or sub-populations. DPA was a program implemented at a province-wide level – more like a child population health intervention. Interventions are typically most successful with individual counseling and support to change personal behaviour and home interventions became more effective than school interventions in literature on intervention efforts (Salmon, Booth, Phongsavan, Murphy & Timperio, 2007). Possibly that level of support could have made a difference at the personnel level of the schools, for example, a resource teacher at the school level.

As an intervention, DPA appeared to be a good start and succeeded in granting the necessity of daily activity attention and some programming. The students in this study liked being active, and liked gym class and pool class and teacher driven activity. Something did not connect the policy to its purpose and somehow the students’ own pre-existing buy-in to being active at school was not captured or leveraged but was actually lost in the journey of the policy from provincial inception to in-class experience. The teachers and students eventually found a harmonious way to fulfill consumption of the DPA 20 minute timeslot by walking together outside. This compromise is an interesting meeting in the middle between the imposition of
activities intended to elevate heart rate that were found to be awkward and irritating by the students and possibly held little comfort or relevance to the teachers. The walking choice even included the teachers themselves in the activity. Thus the student and teacher navigation of the externally imposed structure via policy ended in a comfortable near-activity in which both the students and the teachers could be agents.

If policy implementation included actors in the planning and delivery perhaps this cooperative comfort level could be met and the cardiovascular goal of DPA could also be met. What if students at the school level had been consulted on DPA activities? What if ideas for activities and games were presented from teacher resources and from students’ own ideas and selected or voted on from there? What if students could opt to be part of a rotating pool of leaders of the activities, individually or in pairs? What if they had the option to create DPA according to basic parameters (safety, accessibility, appropriate skill expectations, elevated heart rate etc.) as outlined in the teacher resources? Buy-in for being active was present, buy-in to the living and application of the DPA goal was the missing link. From a sociology of childhood perspective, the whole notion of buy-in is itself problematic. If students are asked to generate ideas for increasing their exercise levels they become (co-)owners (collaborative agents) of the initiative themselves rather than reluctant or resistant subjects. Alternatively it is also possible that DPA is just too abrupt a transition in the middle of class time, or that the students do not consider it PHE and so will always find difficulty in its purpose and fit. It is possible that students who participate in effective, fun DPA from an early grade will not take issue with DPA when they are in grade seven or eight.

The students in my study were gregarious, exuberant and animated in their expression of their experience of DPA. They had ideas why they were made to do DPA and they all varied.
They had strong opinions on the activities in DPA. They loved the break. They experienced self-consciousness or relief. They were cynical about its import, effectiveness and relevance in their own population. They were full of ideas for changes, activity choices and improvements.

Recent literature includes some new discussion and assessment of DPA. Stone, Faulkner, Zeglen-Hunt & Bonne (2012) conducted a seven day accelerometer study of 856 grade 10 and 11 students in Toronto to assess the cardiovascular activity achieved during DPA. Most of the participants did not receive DPA every school day and only 16.1% received it four days a week. None of the students received a full 20 minutes of sustained MVPA, but short bursts of MVPA were experienced and there was a positive relationship between participation in DPA and overall higher levels of physical activity. Another accelerometer study published in 2012 by Patton also found inadequate levels of MVPA during DPA. Brown & Elliott (2015) looked at teacher and principal impressions of DPA and also found that students didn’t meet the required activity levels or amounts. The staff reported lack of resources, space, comfort and time as barriers. They felt DPA held benefits such as calming the students down when they returned to deskwork, and offering leadership opportunities in one school that had the grade 5 and 6 students leading some activities, and they reported that students liked DPA.

DPA as an intervention for the purpose of achieving 20 minutes of MVPA per day has not yet succeeded, but it is not without successes such as enjoyment by some students, increased activity levels, and increased awareness of the importance of physical activity. DPA or another rendition of a daily physical activity program, should remain and be built upon. Daily PHE, daily 45 minute DPA in adequate facilities, meaningful programming lead by teachers and students who are comfortable and trained for the task, student participation in program design and leadership, could contribute to meaningful, effective MVPA and DPA adherence.


Chapter 8: Conclusion

Introduction

This work began with the desire to explore, and ultimately improve, the physical activity experiences of early adolescents and people of all ages. Engagement in physical activity offers quality of life and a healthy society includes physical activity for all. Access to movement is part of democratic living. Yet the majority of Canadians are too inactive to support optimal health (CFLRI, 2008, 2015). I have a personal interest in physical activity as a significant component in my own life for fitness, adventure, joy, accomplishment, outdoor pursuits and connection to nature and community. I have taught physical activities and hopefully helped others discover the joy of movement, fitness, sport, skill development and physical engagement. It is the individual’s experience of intrinsic connection to physical activity that is at the core of my interest, and the possibility that more people could have more movement as part of their daily lives. The literature makes clear that the benefits of physical activity participation are numerous and crucial and that more research is required to bring more people to active lives.

Participation in physical activity earlier in life influences later life participation, there is a general decline in participation over the life course, and girls and women still engage in less activity than boys and men. Physical activity is the single greatest prevention of illness, and support for good physical and mental health. It can also be a social and community link. Mind-body connection and spiritual connection may also be related. And there is an argument that engaging the body is empowering and can add to equity or resistance to oppression. Disengagement, attrition and sedentaryism increase over the life course and studies on
motivation attempt to identify psychological and sociological supports for participation – but no ideal intervention method has been found. Barriers to participation are increasingly well documented but, again, elimination of them has not been worked out. Influences that support participation are varied and a multidisciplinary, holistic or ecological picture best illustrates how friends, family, facilities, gender, socio-cultural, programming, skill development, psychological and educational factors can support or inhibit sustained participation. What was missing from the literature, however, was an effort to investigate what young people of middle school age, i.e. on the cusp of adolescence, felt and thought about the physical activity in their lives and how they wanted it to be the same or different. A sociology of childhood framework was ideal for a study designed around these issues, especially when combined with the feminist approach I had taken in earlier work (Graham, 1996).

For my empirical research, I set out to discover what a sample of grade eight students were doing with their time in order to understand why, if or when it included physically active pursuits – and if not, what were they doing instead? I wondered if the non-school time of these young people was consumed by competing obligations, screen based entertainment or lack of interest; and if they experienced barriers to physical activities such as gender biased or socio-economic limitations. I also expected they might be restricted by parental requirements for supervision and highly structured non-school time. I was curious about what might have changed since my earlier study in the same school.

The participants surprised me in several ways. They were not heavily supervised or parentally restricted, they did not have limited free time due to structured activities or other obligations such as helping at home or jobs, they were not overburdened by homework, and they were not spending great amounts of time in screen-based entertainment. They did not feel
gender bias or sexism at play. And they were not sedentary or disinterested in physical activities, but rather relished them. These young people told me about their experiences of physical activity with gusto, insight, critical analysis and passion – especially about physical activity experienced within school programming. So the study emphasis moved to showcase their comments on in-school physical activity experiences as well as out-of-school physical activity experiences. Anticipation of discussions on gender-biased barriers, lack of interest, or sedentaryism were left behind and I heard detailed descriptions and analyses of what they experienced in their school Physical and Health Education (PHE) class, their new Daily Physical Activity (DPA) timeslot and activities they enjoyed outside of school hours including travelling to or from school. In the remainder of this chapter the field study research questions, findings and limitations are reviewed; followed by discussion on contributions of this work to theory and literature and implications for future research and practical application such as programming. The chapter concludes with final remarks.

The Research Questions

As indicated above, this dissertation investigated the problem of low participation rates in physical activity and declining activity levels over the life course and gender disparity in participation levels through a review of several literatures, complemented by an empirical study of middle school students’ experiences of physical activity using a sociology of childhood approach. Early adolescents were chosen as an age group because they are in the transition years away from childhood play and toward dramatically decreasing levels of physical activity – they offer insight into both how stage of life and early life participation influence later life participation.
My research questions were as follows: (1) How is physical activity experienced in the lives of these early adolescents? (2) What can this experience tell us about keys to participation, or lack of participation, in physical activities? I argued that a multidisciplinary approach to understanding sedentaryism widens and deepens understanding of the problem, and potential solutions, by creating a holistic picture of influences and barriers, and factors that facilitate versus impede or discourage participation. Inactivity is a complex problem and requires a multi-dimensional exposition. I utilized democratic, feminist and sociology of childhood frameworks in designing and executing a study to learn how 25 early adolescents use their time and to hear their thoughts, feelings and experiences of physical activity in their lives. My research sub-questions sought to identify the participants’ participation patterns, the role parents, families, friends, school, community centres played in their participation in both structured and informal spaces, locus of control and where and how agency was at play. A further goal was to see what could be learned to inform research, policy, programming to encourage engaged, sustained participation in physical activities.

I utilized a mixed-method, largely qualitative approach (Chapter two), including a time budget, questionnaires, focus groups and individual interviews. The research sub-questions were well served by this approach.

Findings

The findings included the revelation that these Toronto students were more active than national averages, enjoyed physical activity and valued it, were not heli-parented, enjoyed well-balanced lives including integrated activity, unstructured time, structured extra-curricular activities, and social, community, family and homework time. They were not spending most of their time in screen-based activities and they did not resist, but rather relished, several forms of
physical activity. They benefited from a walkable geographic space in which schools, parks, community and business offerings were in reach. Major influences on participation were family and friends, and school. The presence of friends encouraged participation but wasn’t necessary if they were passionate about the activity. There was gender disparity in activity amounts and intensity with the boys being more active than the girls.

The majority of the students’ physically active time and physical literacy development occurred within school programming. Their in-school experiences provided them with regular activity, fitness, skills training and opportunities for sports play, but school was also a site of conflicting experiences of physical activity. Learning, motivation, joy and striving, social interaction, accomplishment and fun were experienced in school structured physical activity settings as well as frustration, boredom, embarrassment, disappointment and limitations. The participants knew what worked well for them and were able to reflexively discuss programs and policies, resources and leadership that impacted their experiences.

These young people felt activity was important and enjoyed it. Their interest in sports and activities extended beyond school and many spoke fondly of active time with family or friends and of formal and informal activity experiences. They had a wide range of individual preferences for sports and movement. Fun, a sense of an appropriate level of competition or pressure, skill development, sense of challenge and accomplishment, time with family or friends, passion for an activity, and an intrinsic sense of joy or satisfaction enhanced and motivated their participation.

The findings and discussion were organized into what these young people did with their time, why they did things and how they felt about it, followed by the influences on their activity and participation (Chapters four and five). Two chapters (six and seven) were then dedicated to
their in-school related physical activity experiences in physical and health education (PHE) classes and daily physical activity (DPA). These two in-school areas were chosen among a rich result of clustered themes because the participants were most expressive on these topics. Within their conversations the reality of their joy, and the structures within which they experience school based physical activity satisfaction or disappointment, were dramatically articulated. A picture of the limit of their agency and the pervasiveness of a system that aims to do well for children and teens, but does not consult them, was communicated.

In keeping with the predictions of a sociology of childhood approach, the participants could clearly reflect on their in-school physical activity experiences and commented freely and critically on the structures, policies, facilities, staff and programming they participated within. They did not seek to change the existing process for the development of policy, curriculum, staffing or scheduling; they wanted the existing process to work better, to provide better outcomes, to meet their unspoken, unheard needs, and to honour their sense of a right to meaningful, effective physical activity education. They were, despite enthusiasm for physical activity, still at risk of becoming sedentary as their life stage changes. Their high schools would involve greater distances for travel, there would not be outdoor play at lunchtime, PHE would soon be non-mandatory and there would be no DPA. As their lives progress academic and work pressures will put increasing demands on their time.

**Limitations of the Study**

The group studied, though chosen from a school representative of others in the school board in 1996, being situated in an area of the city that was diverse and a good example of a Toronto population in 2007, cannot be considered statistically representative of the city or province. As noted, the particular urban setting in which the school was located held more
potential for walkability and activity than might have been the case elsewhere. Yet as in other qualitative studies, representativeness is not the point: instead, we look for in-depth understanding of an aspect of social life. Learning what is particular to this group and setting can also help us design studies in other sites.

A second limitation is that this study did not include observations or viewpoints of teachers or staff. The original intention of the study was to understand the participants’ experiences in their whole days, not specifically during structured school time. The emphasis on school was generated by the participants themselves. The teachers became a focus of the participants’ commentary, as did the resources, timetabling and curriculum of the school. In the study I conducted in 1996 an ethnographic element was included and observation of academic and PHE classes was permitted. The school board, research department, school personnel, and permissions had changed by 2007 and this study was restricted to study or observation of participating students only during research activities and not during instructional time.

Third, although the study site school area was a good example of Toronto demographics, specifics of disability were not included in the school profile. Thus we do not know if this was a representative school or sample of disability and the study did not investigate disability or accessibility concerns. It is reasonable to assume that some classroom accommodated disabilities (e.g. some learning disabilities) existed in the sample population but no specifics are known.

Fourth, the study data was collected in 2007, and thus there could be questions about changes over time. The area of research into participation in physical activities is busy, dynamic and often utilizes data from experiences and behaviours recorded over time or with time comparison. However, subsequent studies have generated data that suggest that a date label does not particularly limit the value of my findings. For example, recent new data on DPA confirms
what I found in 2007. My participants reported they did not always receive DPA and rarely or never experienced sustained MVPA in DPA - current accelerometer research (Patton 2012, Stone et al., 2012) and interviews of staff (Brown & Elliott, 2015) found the same results. This replication suggests that these experiences were similar in more locations and that the implementation of the DPA policy did not improve over time. The DPA example speaks to the enduring themes of child agency and school structures in the research and experiences of children and youth.

There is a new interest in applying an ecological approach to PPA – this study includes consideration of macro setting elements such as neighbourhood, community, facilities and travel mechanisms. Current calls for research (such as those in The 2015 Participaction Report Card on Physical Activity for Children and Youth) recommend more research into specific areas including gender disparity, age related participation, how young people travel to school and in and about their communities, the role of parents in participation, use or non-use of local facilities and “Research is needed on factors at the student-, school-, and community-level that influence participation in physical activity at school” (Participaction, 2015, p.37). These elements match the foci, approach, timing and relevance of this study.

Finally, questions can be asked about the meaningfulness of any study where the researcher is an ‘outsider’: a topic much debated in qualitative and critical studies. I return to this point below in assessing the contributions of the study.

**Contributions to Theory and Literature**

This study is unusual in its combination of interest in physical activity with the middle-school age-range and a feminist and sociology of childhood theoretical approach. Informed by feminist values of equity and notions of class, the boys and girls’ interests and comments were
explored with a sensitivity to gender disparity and differentiated experience and opportunity. Gender differences were not top-of-mind for these participants as concerns over school logistics and resourcing overshadowed thoughts on gendered programming, options and experiences, but the sociology of childhood approach and methods were well received and rich data emerged.

A sociology of childhood approach was instrumental in conducting research with respect for participants’ knowledge and insight, creating an opportunity for voice, generating useful data and giving a forum to participant standpoint. It was methodologically effective, theoretically relevant and a suitable match for the research topic of physical activity. Applying feminist sensibility, rooted in democratic values, and utilizing a sociology of childhood approach to study early adolescent girls and boys was an effective approach for this study and, to my knowledge, not done in previous work.

Discussions within the sociology of childhood literature include questions about the extent to which any outsider (adult) can capture or represent the world of childhood. Do children tell us what we want to hear? Do they understand our questions as we understand them? If they answer in groups, are there peer pressures, or childhood subcultures operating below the surface that we may not be aware of or sensitive to? However, compared to other approaches, I argue that we can discover more about the social world of childhood by a respectful approach that privileges the expressed views of participants, as I believe I have done here.

The discussion of children or youth’s voice also applies. As researchers we can do our upmost to create a neutral, safe and respectful presence but always we are a person stepping into a space as an outsider with hallmarks of our otherness that will be perceived somehow by the participants - possibly associated with our adult-ness, our academic role, and any number of social markers. Further to this point we see and understand the participants’ contributions
through our own lenses - deliberate lenses such as feminist and sociological, but also our individual experiences and personalities that will always be part of our research and writing. We offer, just as the participants offer, our best effort at an informed, reflective, insightful contribution to the topic and issues of our concern. Multiple methods, literatures, studies and efforts contribute to an increasingly populated picture of the problem and solutions.

Among other particularly interesting findings was the way in which the children spoke about their ‘poor’ school (in resource terms), their efforts to make sense of three classes sharing a space intended for two, and their ideas about what the reasoning behind the 20 minutes of daily physical activity (DPA) was meant to be. What I found was the ways in which students - who generally were not consulted or involving in planning-- tried to comprehend what was going on in their school lives. Here we come close to the writings of sociologists of education who see school as structured to convey messages about power and eventually the social and cultural reproduction of the status quo. I do not have data on how the teachers or the educational administrators or planners saw some of the decisions made that impacted upon the students’ lives. However, my data does allow me to draw a picture of how the recipients of these plans and decisions - the students - see and experience what surrounds them..

**Implications for Future Research and Practical Application**

This research has direct application for educational research and school and community programming. In this study a multi-disciplinary awareness and a sociology of childhood approach proved very effective. For example, understanding individual motivation from a behavioural sciences perspective, coupled with social influence on participation completes a bigger picture. All areas of research and programming could consider participant standpoint, a sociology of childhood method, rethink existing structures and who they were meant to serve and
why, when they were created and how they function how and whom they serve now. And how that might be changed – even radically changed.

Future research could include the simultaneous experience of teachers in school settings, particularly during implementation of new or challenging PA policies. Teachers are not always the architects of school change (Acker, 1999). Continuation of research on the teacher side of the in-school physical activity along with the responses of students would be fruitful. Some work on the teachers’ views has begun on this subject, for DPA in particular. Broader questions on school PHE purpose, policy and pedagogy warrant investigation and discussion, such as Singleton and Varpalotai’s (2012) collection of works in this area including their call for the development of a community of practice comprised of experts from the range of disciplines involved in research and teaching of PHE. They also specifically point to the need to consider the whole child in education, and the inclusion of a critical discourse for both practitioners and recipients of physical and health education.

Continued examinations through connecting an urban or suburban design study to individual behavior to social results would also be a way to see the environment, psychological, and social interactive elements of participation, or lack of participation. Intervention programs and studies could also consider a more holistic approach. Furthermore, a broader and bigger study of early adolescents of the same design as this thesis in different geographic areas (more suburban, more rural) would carry insights from other macro settings for comparison and analysis. Cultural backgrounds of the children, as well as gender and social class, might be considered in a larger study. Future research could also include facility, programming and staff resourcing around accessibility and the specific viewpoints of participants who identify as requiring accommodation or as having a disability.
An intervention program using sociology of childhood generated insights and participant involvement in design and execution at the school or community level would operationalise the findings from this study and generate the next level of data and understanding. Specifically, a DPA effort with participant involvement and sensitivity to participant context and style preferences would build upon the findings discussed in this study.

Public school based physical and health education has moved from a paternalistic nation building purpose (Kirk, 1997; Tinning, 1997) to a public notion that individual health and activity are an individual’s responsibility to maintain, and PHE classes can provide public education on how and why. There is recognition in the literature on PPA of access limits and barriers. Could we take it further with social change to support individuals at the individual action level through better informed structures? So that PHE classes included some mind-body connection, joy, cooperative activity and utilization of student agency? So that programs and policies would reflect the reality and needs of individual experience and better invite lifelong, intrinsically rewarding, participation? Would this mindset involve a change in how citizens, children and youth are regarded – as agential and part of design, in a system with paternalistic benefits (education, skill development and PA experience) as well as democratic process?

Final Remarks

It is worth considering that we have a sedentary population not by lack of interest in activity but by design. We are sedentary by the design of our work, travel, time allowances, leisure options, logistics, physical literacy levels, and cultural norms. As design, the factors that support activity can be located, understood, and most importantly, modified. The problem of sedentaryism can be resolved. A comprehensive look at the literatures provides many of the answers to life course participation. Continued research of subjective experience with these data
can generate key ingredients for a new design. Lifestyle, neighbourhood, workplace, transit, safety, social inclusion, leisure options and individual differences, needs, and standpoints all need inclusion in a new active design. Activity needs to be integrated into logistics of daily life. It needs to feel motivating by being of personal resonance, joy, skill level or development, often involve community or friends, be accessible and include multiple ages and levels. It ultimately needs to be woven into practical daily life.

It is an exciting time to consider physical activity experiences, levels and influencing factors for Canadians. Research has boomed and there is a feeling of public awareness and attentiveness to the value of exercise and fitness. Words such as “walkability”\(^2\) or “walk score”\(^3\), “active transportation”, \(^4\) “bike lanes”, “free range”\(^5\) children and “play”\(^6\) are in media and in common conversation. There is much reason for optimism that lifestyle and urban design could be less likely to neglect impact on human movement. “Green space”, “vitamin G” and attention to transit are also current common text. Child and youth voice has yet to join these conversations.

Inactivity is socially inherited by young people via environmental influences. The socialization of youth is by a primarily sedentary population so there is some, but not enough, structure and modeling and adult comfort in place for lifelong participation in physical activities. Children will “socialize up” (influence their elders) where possible. This phenomenon could be embraced. It is worth remembering, as we engage in all areas of related research and

\(^2\) The degree to which a neighbourhood or urban area offers safe, appealing and purposeful walking including sidewalks, traffic control, walking-distance amenities and safety features such as lighting and observable space.
\(^3\) A numeric system to rate addresses or areas on walkability. Typically included in real estate promotion features.
\(^4\) Methods of travel from one place to another that use human energy. For example walking, biking, skateboarding, wheeling.
\(^5\) A parenting approach to giving children more responsibility and autonomy and less supervision than was typical in recent previous decades. It can include greater freedom of movement in community spaces and self-powered transit.
\(^6\) Play and a sense of play expressed physically or in spirit is being understood as an area of research and of value for people of all ages to improve wellbeing.
programming that the desire to be active by young teens is there. It is here. The programming needs to be sensitive to their needs by including variety, a welcoming atmosphere, skill development, well-matched challenge levels, choice, room for friendship, accessibility and by including young teens as active agents and leaders in the inception and execution of the programming in which they are to take part. There is good reason to be positive about participation in physical activity prospects. Apply democratic principles, give attention to standpoint, and remember that the effort and experience is ultimately about joy.
References


Giles-Corti, B., & Donovan, R. J. (2002). The relative influence of individual, social and physical environment determinants of physical activity. *Social Science and Medicine, 54*, 1793-1812.


**Appendix A: Acronyms and Terms**

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>DPA</td>
<td>Daily Physical Activity – the program initiated by the Government of Ontario for daily in-school 20 minutes of activity</td>
</tr>
<tr>
<td>Early Adolescence</td>
<td>In general young people aged 12 to 15. This study’s participants were 13 to 14. Early adolescents may be referred to as teens, teenagers, children, adolescents, girls and boys, pubescents, young people or youth.</td>
</tr>
<tr>
<td>KKD</td>
<td>expenditure of kilocalories per kilogram</td>
</tr>
<tr>
<td>MPA</td>
<td>moderate level of physical activity (e.g. brisk walking)</td>
</tr>
<tr>
<td>M-VPA</td>
<td>moderate to vigorous level of physical activity</td>
</tr>
<tr>
<td>PA</td>
<td>physical activity including exercise, sport, dance, movement</td>
</tr>
<tr>
<td>PBM</td>
<td>peak bone mass</td>
</tr>
<tr>
<td>Physical Literacy</td>
<td>skill and competence in physical movement to facilitate participation and comfort in a range of physical activities</td>
</tr>
<tr>
<td>PPA</td>
<td>Participation in Physical Activity</td>
</tr>
<tr>
<td>PHE</td>
<td>Physical and Health Education (also called PE or Gym Class)</td>
</tr>
<tr>
<td>QDPE</td>
<td>Quality, Daily Physical Activity</td>
</tr>
<tr>
<td>Sedentaryism</td>
<td>Inactivity by a group or individuals - and a phenomenon, group or cultural characteristic or habitual behaviour of low activity levels</td>
</tr>
<tr>
<td>SES</td>
<td>Socio-economic status</td>
</tr>
<tr>
<td>TDSB</td>
<td>Toronto District School Board (an amalgamated school board formerly the Toronto, East York, Etobicoke, North York, Scarborough and York Boards of Education)</td>
</tr>
<tr>
<td>VPA</td>
<td>vigorous level of physical activity (e.g. running / sweating and breathing hard)</td>
</tr>
</tbody>
</table>
Appendix B: Participant Pseudonyms

The following pseudonyms are used in the qualitative data.

Brian
Cassie
Clay
Cleo
Dana
Dawe
Dora
Eva
Felix
Kamau
Izzy
Jasmin
Jennifer
Joanna
Ling
Logan
Nalin
Rachel
Raymond
Sarah
Shanasa
Sophie
Appendix C: Letter of Consent to Parents and Guardians

date
Andrea Graham
Department of Sociology and Equity Studies in Education
Ontario Institute for Studies in Education
12th Floor, 252 Bloor Street West
Toronto, Ontario M5S 1V6

Dear Parents and Guardians;

I am a student at the Ontario Institute for Studies in Education (OISE) at the University of Toronto. Part of my research involves observing and interviewing middle school students to learn about their experiences of extra-curricular and non-classroom experiences and time. Participants will complete a one-page schedule work sheet (10-15 minutes) and participate in a group interview (20 to 30 minutes). This may be followed by individual interviews (10-15 minutes). The final part is two-page questionnaire (10-15 minutes) and thank-you snack event. The students will have an opportunity to express their perceptions of extra-curricular, recreational, school and non-school time and programs. An example of a question that might be asked is “What is your favourite thing to do after school?” The interviews will be audio-taped to facilitate accuracy of data collection, however, you have the option to have your child participate without audio recording. The project will be conducted over the next few weeks and will conclude with a pizza or snack event to thank students for their participation.

Your permission is required for this research and your cooperation would be greatly appreciated. In accordance with the University of Toronto and the Toronto District School Board research standards, you are assured of the following:

• The information I gather will not be seen by school personnel or other students.
• Student confidentiality is assured; student names will not be exposed, all original data will be destroyed upon completion of the thesis and publications.
• This study is unrelated to the school curriculum and any involvement will have no bearing on your child’s evaluation.
• Students are free to withdraw their participation at any time.

Please fill out the section below and send this letter back to me via your son or daughter. If you have any questions about the study please contact me through the school office or by email at ak.graham@utoronto.ca.

Thank you,
Andrea Graham B.A., B.Ed., M.A.

________________________________________________________________________________

I give permission for my child to participate in the study described above (please check each component you agree to):

___ 1-page schedule worksheet
___ group interview
___ individual interview
___ for the interviews indicated here to be audio-taped
___ 2-page questionnaire
___ all study components

___ I do not give permission for my child to participate in the study described above.

________________________________________________________________________________

Name of child ___________________________ Signature of parent/guardian ___________________________

________________________________________________________________________________

Date ________________
Appendix D: Snapshot Time Budget

YOUR TIME

Please print your daily activities in the corresponding box.

<table>
<thead>
<tr>
<th></th>
<th>MONDAY</th>
<th>TUESDAY</th>
<th>WEDNESDAY</th>
<th>THURSDAY</th>
<th>FRIDAY</th>
</tr>
</thead>
<tbody>
<tr>
<td>BEFORE SCHOOL</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AT LUNCH TIME</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>AFTER SCHOOL</td>
<td></td>
<td></td>
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</tbody>
</table>

Please turn over to second side.

<table>
<thead>
<tr>
<th></th>
<th>SATURDAY</th>
<th>SUNDAY</th>
</tr>
</thead>
<tbody>
<tr>
<td>MORNING</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AFTERNOON</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EVENING</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

How do you usually get to and from school? (Check one)

- walk
- in a car
- in a bus
- on my bike
- rollerblade, skateboard
- run
- other (please write down how you get to school) ______________________

How long does it take you to get to school? ____________

Thank You!
Appendix E: Individual Interview Questions

1. When you were younger did you play on the street etc. Do you play out there now? (or elsewhere) Why? Why not? Do you think you will in the future?

2. (Reference to their favourite activity) How many hours a week are you active (time budget…) What is it about that participating in x that makes it your favourite/enjoyable? What would it be like for you if you didn’t or couldn’t do it anymore? (If relevant talk about what makes this activity possible. E.g. transportation, parents’ support etc.) If relevant, talk about their history of involvement in the sport/activity.

3. If your friends weren’t doing/ playing x would you continue doing it?

4. Think of a sport or activity which you dislike. If all your friends were doing it would you go along? (if no, what about a sport you feel neutral about?)

5. Is there a sport or activity you wish you could do but you can’t? Which ones? Why can’t you? What would have to be different?

6. How do you feel when you are in your Phys. Ed. Class? (expect answers such as happy, sad, strong, weak, excited, insecure, relieved, embarrassed…)

7. Do you think it is different for girls and boys in sports and physical activities? Why?

8. What would your ideal Phys. Ed. Class include? What would your ideal intramural program be like? What would your ideal community program be like? Other places/activities.

Thank you and wrap up.
Appendix F: Small-Group Interview Questions

These are semi-structured interviews. The participants will be free to add their own ideas, opinions and stories. Questions will also evolve with the students’ areas of interest.

1. What part of the day do you like best? - during school, outside of school…
   Least?
   What is your favourite thing to do after school (or after dinner) or on weekends? Why? With who?
   Discuss extra-curriculars at school, intramurals

2. Tell me about DPA…

3. PHE: What do you like best?
   Least?
   If you could change something what would it be?
   What would be different if your classes were co-ed/single-sex?
   Which do you prefer?
   What about before grade 7? After grade 8?
   Do you think you will be taking PHE in grade 9, 11…?
   If it was not mandatory would you take it?
   Would you like it if it was every day? Why or why not?

4. What do you see if you picture yourself at 18 years old? Do you think you will be doing X (an activity they like)?
   Why, Why not? (Possible discussion here or earlier on health and fitness)

5. Are physical activities important? Why? Why not? (do they change people?)

6. What is your favourite physical activity? (may discuss/define physical activities)
   Why do you do it?
   Would you do it if x not present?
   How do you feel when you are doing it?
   What is the best part?

   If you couldn’t do it what would you feel?

   What is your least favourite physical activity? Why?

7. How close is the nearest community center e to you? How often do you go there? Likes? Dislikes?
   Other spaces in the community?

8. Why do you think people do PA?

9. Additional questions in response to their interest and areas of discussion:

   Are you looking forward to high school?
   Why / why not?
   Summer plans
## Appendix G: Questionnaire PART I

1. How many minutes or hours do you spend in any of the following activities when you are not at school:

<table>
<thead>
<tr>
<th>Activity</th>
<th>MON</th>
<th>TUES</th>
<th>WED</th>
<th>THUR</th>
<th>FRI</th>
<th>SAT</th>
<th>SUN</th>
</tr>
</thead>
<tbody>
<tr>
<td>Socializing with friends</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Using technology not for homework (computer, TV, cell etc.)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chores or family responsibilities</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Job or volunteer hours</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hobbies that are not physically active</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Physical activities or sports that are easy/light (strolling at a mall).</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Physical activities or sports that are moderate (brisk walking)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Physical activities that are intense (running)</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
</tbody>
</table>
2. What activities or sports did you do in the past but do not do anymore?
_________________________________________________________________
Why don’t you do them now?
_________________________________________________________________
_________________________________________________________________

3. What is the active thing you do most often? __________________________

4. This is a list of factors which may or may not encourage you or allow you to do this activity.

Circle the number which best represents how much influence the factor has on your participation in your activity.

1 = no influence at all, if it did not exist my participation in the activity would remain unaffected
2 = almost no influence
3 = a bit of influence
4 = quite a lot of influence
5 = total control, if it were not for this factor I would not be able to do my activity

<table>
<thead>
<tr>
<th>Factor</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Friend</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Family</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Gym Class</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Other School Activities</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Recreation Centre</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Private Club</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Other _____________</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

(please specify)

5. Do you think being active makes people your age feel better about themselves? (higher self-esteem)? yes___ no___ no effect___
Comments

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

6. Do you think being active makes people your age perform better in academic school work (higher grades)?  yes___ no____ no effect___

Comments

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

END OF PART I – THANK YOU!
Appendix H: Questionnaire PART II

Now that you know that teenagers tend to leave physical activities you can help answer the question: why?

1. Write down every and any idea you have to answer the question: why do teenagers stop physical activities?

2. And…Why do you think girls drop out of physical activities more than boys?

3. Go back to you answers to question 1 and mark the reason which you think is the most important reason with a #1 and the reason you think is the second most important reason with a #2.

4. Now do the same for you answers to question 2.

5. Do you think you will be more or less physically active when you get older?
   Why?

END OF PART II – THANK YOU AGAIN!!