

Keeping Girls in the Gym: An Examination of the Reasons Why Females Choose Not to
Participate in High School Physical Education

By

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Abstract

With the changes of removal of mandatory participation in physical education (PE) classes and topics taught in these classes, there has been a decline in the participation rate across the board, but most specifically in the female population (Dwyer et al., 2006). With concerns of obesity, inactivity, and mental health issues on the rise, it is necessary to look at why these individuals are not participating. The purpose of this paper is to understand why female high school students do not enroll in senior elective PE classes. An extensive review of current PE literature, combined with a survey/focus group pilot project in Sudbury, Ontario was completed to help determine these reasons. The results of this paper indicate that there are three overarching themes as to why females are not continuing after the mandatory grade 9 class: 1) body image, 2) confidence in athletic abilities, and 3) curriculum and teaching styles. Within these themes, female students feel they should be comfortable and confident with themselves before immersing themselves into PE classes. Additionally, students believe that the content of classes should be adapted to suit current needs of students and promote life-long health and activity participation. Students are not necessarily finding satisfaction and usefulness in the basketball, soccer and volleyball based gym classes, so it is important that schools consider implementing more individual and everyday activities such as hiking, yoga, swimming, etc. These may be the very activities that allow students to feel successful in the classroom and develop habits for necessary participation as they leave high school and move towards adulthood.

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Introduction

Up until 1989, high school students were required to complete physical education (PE) classes in grades 9 through 12. After which, Ontario's secondary school curriculum mandated that all students be required to complete one physical education class, which provides instruction in exercise, care and hygiene of the body, during their high school tenure (Avis, Drysdale, Gregg, Neufeldt & Scargill, 1983; K. Imrie and N. Scheel, personal communication, January 29, 2014; Ontario Ministry of Education (OMoE), 2013). However, research has shown that after completing this mandatory course, most female secondary students choose not to register for another PE course during their high school career (Friedman, 2002; Gibbons, Wharf Higgons, Gaul, & Van Gyn, 1999; Humbert, 1995). This is further problematic as the research shows that adolescent girls' physical activity levels are declining more rapidly than those of their male counterparts (Dwyer, Allison, Goldenber, Fein, Yoshida, & Boutilier, 2006). While many students prioritize taking other courses, including math and science over PE, the growing concern of obesity and inactivity rates and the desire of the government to promote life-long physical activity signals a need to better understand the reasons that high-school-aged girls refrain from enrolling in PE classes (Flintoff & Scraton, 2001; Gibbons & Humbert, 2008).

The implementation of a 20-minute Daily Physical Activity (DPA) program in all Ontario elementary schools in 2005 was intended to establish increased awareness about the importance of daily physical activity for elementary school aged children, and to “show the students the importance placed on being healthy and active – a lesson that will stay with them for the rest of their lives” (Ontario Ministry of Education (OMoE), 2009;

OMofE 1-3, OMofE 4-6, OMofE 7-8, 2005; Ontario Ministry of Education – Boards (OMofEB), Ontario Ministry of Education – Principals (OMofEP), 2006). While this program has been well intended, many have argued that it may not instill life-long daily physical activity regimes among its participants (Active Healthy Kids Canada (AHKC), 2011; Active Healthy Kids Canada Ontario (AHKCO), 2011). For example, only 27% of Canadian female youth (grades 6 to 10) were physically active for 60 minutes/day, five days a week (Boyce, 2004, p 79). According to the Canadian Health Measures Survey (2007-2009), only 7% of Canada's youth aged 6-19 are participating in the recommended 60 minutes of moderate-vigorous physical activity per day (AHKC, 2011; AHKCO, 2011). Additionally, in Ontario, the 11-14 and 15-19 year old age groups show a drastic decline in physical activity (measured in daily steps) when compared to the 5-10 year old group (AHKCO, 2011).

While these statistics may appear alarming, studies have shown that girls' participation in DPA, or lack thereof, is far more complex than providing young girls with persuasive literature encouraging them to be active and citing the benefits and importance of an active lifestyle. While the importance of DPA for adolescent girls has been well documented (e.g. Reid, Dyck, McKay, & Frisby, 2000; Centers for Disease Control & Prevention, 2010; Bailey, Wellard, & Dismore, 2005), there are a number of barriers that prevent the adolescent-aged population from engaging in physical activity, including a lack of time due to other commitments, such as homework, part-time jobs, and family responsibilities (Allison, Dwyer & Makin, 1999; Dwyer et al., 2006; O'Dea, 2003; Robbins, Pender, & Kazanis, 2003); and excessive costs, including facility membership fees, transportation costs, and equipment/clothing costs (Allison et al., 1999;

Dwyer et al., 2006; Sallis, Prochaska, & Taylor, 2000). In addition to the barriers listed above, there are also significant psychological barriers that prevent participation, including self-motivation, self-discipline, and a feeling of a lack of social support (Robbins et al., 2003; Sallis et al., 2000; Tegerson & King, 2002); and image concerns, wherein many adolescent girls specifically, avoid participating in sport and physical activities because they worry about appearing unfeminine or “tom-boy like” (Allison et al., 1999; Dwyer et al., 2006; Robbins et al., 2003; Sallis, Zakarian, Hovel, & Hofstetter, 1996; Sallis et al., 2000).

Studies have shown that many of these barriers also prevent girls from enrolling in secondary PE classes and one of the primary issues they face is the co-education setting (Cockburn & Clarke, 2002; Olafson, 2002). Many girls feel embarrassed about engaging in activities with and against their male classmates for fear that they do not appear attractive or feminine (Cockburn & Clarke, 2002; Olafson, 2002). Public demonstrations in front of classmates and instructors, especially for girls who believe they have lower skill levels than their peers, can lead to an increase in anxiety (Cockburn & Clarke, 2002; Olafson, 2002, Smith & St. Pierre, 2009). Competitive settings in co-educational classes can also lead to the girls experiencing a lack of support from their peers (Olafson, 2002; Smith & St. Pierre, 2009). Female students often feel as though teachers favour male students in physical education classes and allow them to select the class activities and games to play while not allowing female participants such a choice (Gibbons & Humbert, 2008).

The curriculum content, specifics of a PE course, and delivery method has also been shown to prevent adolescents from enrolling in physical education (Olafson, 2002;

Smith & St. Pierre, 2009). For instance, demonstration in front of classmates can be embarrassing for those with lower skill levels, and may increase a sense of competition within the class. Anxiety arising from these issues is even further exacerbated within co-educational settings (Smith & St. Pierre, 2009). Uneasy feelings toward co-educational settings, intolerable peer relations, and lack of effort from peers were also common themes among recent studies (Olafson, 2002; Osborne, Bauer, & Sutliff, 2002; Smith & St. Pierre, 2009).

It is necessary to explore the research further and look at populations within areas that have not been studied at this time. The city of Sudbury, and even the province of Ontario, has not been thoroughly addressed when it comes to looking at participation barriers towards PE classes. It is important to look in these areas to see if the reasons differ from other areas of Canada and across the world. Additionally, although reasons females are choosing not to enroll in PE past grade 9 have been addressed, there seems to be a lack of literature addressing how the barriers could be addressed and perhaps overcome to assist in participation. Thus, the purpose of this paper is to understand why high school girls do not enroll in senior elective PE classes.

Literature Review

Past Trends in Girls' Physical Education in Canada

An initial push for physical education came from the English settlement throughout Canada. The English system felt that “sports can be used to mold character and prepare one to meet and solve the problems of life” (Cosentino & Howell, 1971, p.10). Throughout the late 1800’s and early 1900’s the “Ryerson system” became dominant in schools across the country; our connection with the United States influenced our PE practices, and a Trust Fund increased the delivery and use of military practice in schools, all of which greatly influenced Canada’s physical education practices.

Physical education in Canada has adopted many guiding principles, ideas and themes since the 1800’s. The programs have since then shifted from a militaristic style to one that better serves the students and their ever-changing needs (Cosentino & Howell, 1971; Gurney, n.d.; Morrow, Keyes, Simpson, Cosentino, & Lappage, 1989). Physical education in the mid to late twentieth century focused on student-centered learning, fitness and sport, and game style interaction rather than strict forms of drills, gymnastics and calisthenics (Cosentino & Howell, 1971; Morrow et al., 1989; Morrow & Wamsley, 2010; Van Vliet, 1965). Unfortunately, one area that saw much struggle and is still considered an issue, is that of girls and physical education. Although the overall development of physical education across the provinces was positive, many viewed the development of girls and physical education as lacking fairness, variety, etc.

At the turn of the twentieth century, the initial attempt to formalize girls’ physical education was focused on teaching appropriate feminine behaviour and practices and many young women took part in some form of physical activities including bicycling,

horseback riding, and curling (Hall, 1968, 2002; Lenskyj, 1986; Smith, 1988). However, it was still viewed that young women could not “ride, dress and look like a man and still pack along her charm as a woman, at least to the same degree” (Proctor, 1929). Women were viewed as the future wives and mothers of Canadian society and as such, they needed to be prepared for this role and be able to demonstrate the necessary skills of the roles without struggling at them.

In the early 1900’s physical education for girls was delivered through formalized instruction. The ideal feminine woman did not include competency in sport and physical activities beyond “a level necessary for health, or more specifically, for the reproductive health” (Lenskyj, 1982, p.1). This included various gymnastics and other exercises to promote “a beautiful and well-rounded bust” and assist with “false positions and habits of sitting, standing and walking” (Lenskyj, 1982, p.1 & 2).

Girls who attended private educational institutions had more access and exposure to physical activity and athletics because “private schools were more willing to introduce exercise and physical culture into the classroom than were the public schools” (Hall, 2002, p.27). Since there was a tuition charge, the students had access to better facilities, equipment and extra-curricular activities. These institutions were also sex segregated and as such, this enabled the female students to express their physicality freely. These students were considered to be the ideal “mothers of tomorrow” and therefore, their health determines the health of their future children (Hall, 2002; Lenskyj, 1986).

Unfortunately, those who attended the Canadian public schools were not as lucky. The private schools provided a “supportive, separate sphere, designed to promote true-womanhood” but the public schools worked to separate the boys and girls through sex-

differentiated curriculum (even though co-education was an accepted practice at this time) (Hall, 2002, p.29). The schools created separate entrances, stairwells and sometimes buildings that kept the girls and boys from interacting (Gurney, 1982; Hall, 2002). On many occasions, there were often no physical fitness facilities for female students (Hall, 2002). The female public school curriculum included light practice of calisthenics, and basic dumbbell practices (Hall, 1968, 2002).

By the 1920s, female students had begun to participate in interschool competitions in sports such as baseball, track and field, and basketball (Kidd, 1996; Lenskyj, 1982; Van Vliet, 1965). With the opening of Canada's first Women's Physical Education Department at the University of Toronto in the school calendar year of 1915-16 (1920 marking it as a specific department), physical education for girls and women became a focus (Van Vliet, 1965). From this achievement, schools across the country began to follow suit and instruction in various sports and activities were offered to females within this department (Hargreaves, 1994; Van Vliet, 1965). Throughout the late 1800's and early 1900's, sport and physical education for women was meant to evoke healthful habits acceptable to their gender and fertility and was meant to develop physical strength and endurance for the male gender (Lenskyj, 1982).

As time progressed from the first decades of the twentieth century to post-war years, a change in physical education and its availability began to occur. The 1920s were often referred to as the Golden Age of Sports for Canadian women because an increasing number of sporting opportunities became available to women (Cochrane, Hoffman, & Kincaid, 1977; Morrow et al., 1989). Arguably, following the years of the war, "there was a new and positive feeling about women's relationship to sport that was revealed

both by their participation and by their evident interest as onlookers” (Morrow et al., 1989, p.236). Various organizations and churches also began to offer activity and sport instruction to the female population (Hall, 1999; Van Vliet, 1965). Sports were becoming overly available and popular within the school systems.

Females began to partake in interschool competitions in sports such as baseball, track and field, and basketball (Kidd, 1996; Lenskyj, 1982; Van Vliet, 1965). In addition, the female students who had access to university also had opportunities to compete in activities such as archery, badminton, swimming, and so on. The number of sports clubs and associations were increasing across the country, which was another avenue available for females to participate in competitive sports (Lenskyj, 1982). Activities such as basketball, fencing and hockey were a major interest for females (Hall, 2002). From this achievement of opening a Women’s Physical Education Department at the University of Toronto, schools across the country began to follow suit and instruction in various sports and activities were offered to females within this department (Hargreaves, 1994; Van Vliet, 1965). The school systems started delivering physical education within five key areas: movement, gymnastics, dance, games and athletics, and swimming (Van Vliet, 1965). Movement included conditioning exercises, rhythmic and modern dance, gymnastics involved tumbling, using apparatuses and pyramid work, and dance included folk and ballroom lessons. The games and athletics section practiced track and field, as well as other individual and team games. Lastly, swimming included necessary instruction of various strokes, water safety, diving, synchronized and life-saving techniques (Van Vliet, 1965).

From the post-war years to the 1970's, there was a lot of emphasis and effort put into the development of physical education and activity. Instruction of the students was being left to the teacher's in the schools, resources and more diverse curriculums were being developed, and some scholarships were created to encourage participation (Cosentino & Howell, 1971). Curriculum content, evaluation methods and resources have continued to grow since this time. The number and types of classes being offered in schools have also increased. While many of the basic fundamentals of PE have remained within curriculum guidelines (movement skills, sport and recreation, individual and team settings), the variety of sport and activity delivered to help achieve these fundamental skills has evolved (OofME 9-10, 1999).

While physical education has evolved over time, and we have seen many positive changes and additions, there are still many barriers faced on a daily basis. Women have been faced with many barriers and judgment to participation in sport and physical activity. Sport, physical activity, and physical education have become much more accessible to females across the country but based on extensive research there are still many challenges or barriers these individuals are faced with. This is evident in the pilot project where, based on communications with colleagues in the Rainbow District School Board, the percentage of girls that do not go on to further enroll in PE classes beyond the mandatory grade nine class is at 40% (Personal Communication, August 17, 2015). This demonstrates a need to connect with these students to determine why they are not continuing.

Current Physical Education Curriculum

The health and physical education curriculum of Ontario has been left unaltered and untouched since 1999 (OofME 9-10, OofME 11-12, 1999). In February of 2015, the new health and physical education curriculum for high schools in Ontario was released (OofME, 2015). The new curriculum focuses on Healthy Active Living Education (HALE) courses within each grade, as well as three specialized “Destination” courses in the senior grades of 11 and 12 (OofME 9-12, 2015). The HALE courses seem to be the crux of the new PE curriculum in Ontario, and are where a lot of adaptation has occurred when compared to previous curriculum documents.

“The emphasis of the HALE courses is on providing students with the knowledge and skills they need to make healthy choices today and lead healthy active lives in the future. Through participation in a wide range of physical activities, they develop knowledge and skills related to movement competence and personal fitness that provide a foundation for active living. They also acquire an understanding of the factors and skills that contribute to healthy development and learn how their own choices and behaviours, as well as various factors in the world around them, affect their own and others’ health and well-being. Through the HALE courses, students build a stronger sense of themselves, learn to interact positively with others, and develop their ability to think critically and creatively” (OofME 9-12, 2015, p.19).

The HALE courses all include a healthy living component, but push further by including additional focus areas such as personal and fitness activities, large-group activities, individual and small-group activities, aquatic activities, rhythm and movement

activities, and/or outdoor activities (OofME, 2015). As students are choosing and enrolling in their classes each year, they are encouraged to take more than one PE course provided the focus areas are different than previous courses taken. There are three main outcomes of the focus courses, but for the purpose of this project, the most relevant is “to increase the rate of students’ participation in physical activity and engage a wider number of students by responding to their interest in particular types of activities” (OofME 9-12, 2015, p.21). The Destination courses, as mentioned above, include three classes: Health for Life (grade 11) which is a college preparation course, Introductory Kinesiology (grade 12) which is a university preparation course, and finally Recreation and Healthy Active Living Leadership (grade 12) which is a college or university preparation course (OofME 9-12, 2015).

The curriculum expectations have also been adapted and suit the content of the individual courses instead of being overarching as they were in the 1999-2014 deliverables. The HALE courses and destination courses have individualized sets of expectations to ensure students are getting what they truly need out of the classes. For the HALE courses, there are now only three strands (compared to four): Active Living, Movement Competence – Skills, Concepts, and Strategies, and Healthy Living. For the Destination courses, the ministry has worked to develop each courses own set of strands and sub-categories to ensure they are delivering the required learning in each area as well as preparing students who are planning to enroll in certain postsecondary programs or occupations that require knowledge in these areas (OofME 9-12, 2015). The chart below breaks down the Destination courses strands and sub-categories (OofME 9-12, 2015).

Strands and Sub-categories of Destination Courses:

Health for Life (11)	Introductory Kinesiology (12)	Recreation and Healthy Active Living Leadership (12)
College Preparation	University Preparation	College/University Preparation
Determinants of Health <ul style="list-style-type: none"> - Personal Factors - Social Factors - Environmental Factors 	Physical Activity and Sport in Society <ul style="list-style-type: none"> - Social Change and Current Issues - Participation – Influences and Benefits 	Leadership <ul style="list-style-type: none"> - Leadership Styles - Leadership Skills - Group Dynamics and Teamwork
Wellness <ul style="list-style-type: none"> - Personal Wellness - Implementing a Personal Wellness Plan 	The Basis of Movement <ul style="list-style-type: none"> - Anatomy and Physiology - Human Performance 	Facilitation of Recreation and Leisure <ul style="list-style-type: none"> - Promotion of Lifelong Participation - Event Planning and Coordination - Safety and Injury Prevention
Healthy Communities <ul style="list-style-type: none"> - Consumer Health - Components of Healthy Communities - Promoting Healthy Living 	Biomechanics and Motor Development <ul style="list-style-type: none"> - The Mechanics of Movement - Growth and Motor Development 	Mentoring Development <ul style="list-style-type: none"> - Mentorship - Healthy Active Living Plan

Upon review of the new curriculum standards set out in early 2015, it is apparent that the lack of participation in PE classes has been recognized and that the need to change the content and delivery to ensure students want to enroll in classes has been realized. The new HALE and Destination courses, along with their new expectations seem to address this concern.

Methods

The purpose of this paper is to understand why high school girls do not enroll in senior elective PE classes and ask the girls thoughts on what could be done to improve the current system and its' offerings. This was addressed in two important ways: (1) through a critical examination of the literature; and (2) through surveys and a focus group conducted with high school girls from the Greater Sudbury area on their experiences with PE.

Approach to the Critical Review of the Literature

The literature review was conducted in several stages. It began with literature collection, and then reading and organizing of the various articles and resources. First, literature needed to be found to review. The tables below list the various areas searched as well as the key words/phrases used to find information.

Search Engines, Website and Journals used to find literature:

Search Engines	Websites	Journals
CINAHL	Canadian Association for Health, Physical Education, Recreation and Dance	A to Z E-journals
Dissertations and Theses	Google	AVANTE
ERIC	Google Scholar	European Physical Education Review
Laurentian University Library and Catalogue	Ministry of Education	Physical Educator
Ontario Institute for Students in Education Library and Catalogue	Ontario Physical and Health Education Association	Sport, Education and Society
Physical Education Index		
SPORTDiscus		

Key words and phrases used when searching for literature:

Physical Education
Gym
Health
High School Physical Education
Secondary School Physical Education
Physical Education Curriculum
Education
Sports
Physical Activity
High School Gym
Girls
Participation in Physical Education
Participation in Gym
Daily Physical Education
DPA
Physical Education or Gym or Physical Activity
Physical Education and Ontario
Physical Education and Girls
Physical Education and Canada
Physical Activity and Canada
Physical Activity and Girls
Participation and Physical Education
Physical Education and High School
Girls and Gym
Participation and Gym
Physical Education and Curriculum
Gym and High School
Participation and Physical Education and Canada
Body Image and Physical Education

While reading, articles were separated into three sub-sections: ‘Very relevant/applicable to paper’, ‘Moderately relevant/applicable to paper’, and ‘Not relevant/applicable to paper’. Furthermore, the quality of each source and article was appraised to ensure that the evidence and content being used was most appropriate for this project. This helped to decrease the seemingly endless amount of resources to the

number used for this project. Questions asked to determine level of relevance and/or quality of the document/resource included:

- How recent is the article?
- What source is the article from?
- What country/region is the research based on?
- Does it include information regarding males and females, or one gender only?
- What age/grades does the research include and/or exclude?
- Does it discuss reasons for participation/non-participation in physical education?
- Does it list barriers to participation?
- Was it based on physical education and/or physical activity?

As writing progressed, these divisions were looked at to ensure all documents were used as necessary. As articles and resources were read and re-read, general themes started to appear, and things were further separated into similar topic areas to be able to implement them into specific sections of this paper. This method, of separating content of articles into similar topics, began to follow a structure of separating literature into content themes (Carnwell & Daly, 2001). This method seems to be particularly popular, as it often combines theoretical literature and research literature (Carnwell & Daly, 2001).

By reviewing the literature documents several times, distinct patterns were determined in what was said and recurrent themes that arose were identified after extensive review. According to Denzin & Lincoln (2003), coding involves tasks such as sampling, choosing units of analysis, and identifying themes. A thematic analysis approach was employed, which worked to identify, analyze and report specific patterns or

themes within the literature. In its basic form it helps to “organize and describe the data in (rich) detail (Braun & Clarke, 2006). These themes will come from across the entire data set (Braun & Clarke, 2006; Sandelowski & Barroso, 2003). To avoid suffering critique of using qualitative methods and the idea that ‘anything goes’ a checklist will be followed to ensure good thematic analysis occurred.

15-point checklist of criteria for good thematic analysis (Braun & Clarke, 2006):

Process	Number	Criteria
Transcription	1	The data have been transcribed to an appropriate level of detail, and the transcripts have been checked against the tapes for ‘accuracy’
Coding	2	Each data item has been given equal attention in the coding process
	3	Themes have not been generated from a few vivid examples (an anecdotal approach), but instead the coding process has been thorough, inclusive and comprehensive
	4	All relevant extracts for all each theme have been collated
	5	Themes have been checked against each other and back to the original data set
	6	Themes are internally coherent, consistent, and distinctive
Analysis	7	Data have been analyzed – interpreted, made sense of – rather than just paraphrased or described
	8	Analysis and data match each other – the extracts illustrate the analytic claims
	9	Analysis tells a convincing and well-organized story about the data and topic
	10	A good balance between analytic narrative and illustrative extracts is provided
Overall	11	Enough time has been allocated to complete all phases of the analysis adequately, without rushing a phase or giving it a once-over-lightly
Written Report	12	The assumptions about, and specific approach to, thematic analysis are clearly explicated.
	13	There is a good fit between what you claim you do, and what you show you have done – i.e., described method and reported analysis are consistent
	14	The language and concepts used in the report are consistent with the epistemological position of the analysis
	15	The researcher is positioned as <i>active</i> in the research process; themes do not just ‘emerge’

For this project, a six-step analysis process, taken from Braun & Clarke (2006), was used. Meaningful comments, quotes and topics from the literature were noted and continuously compared and like ones were grouped together (Glaser & Strauss, 1967; Whitehead & Biddle, 2008).

6-step analysis process (Braun & Clarke, 2006):

Phase	Description of the Process
Familiarizing yourself with data	Transcribing data (if necessary), reading and re-reading the data, noting down initial ideas
Generating initial codes	Coding interesting features of the data in a systematic fashion across the entire data set, collating data relevant to each code
Searching for themes	Collating codes into potential themes, fathering all data relevant to each potential theme
Reviewing themes	Checking if the themes work in relation to the coded extracts (level 1) and the entire data set (level 2), generating a thematic ‘map’ of the analysis
Defining and naming themes	Ongoing analysis to refine the specifics of each theme, and the overall story the analysis tells, generating clear definitions and names for each theme
Producing the report	The final opportunity for analysis. Selection of vivid, compelling extract examples, final analysis of selected extracts, relating back to the analysis to the research question and literature, producing a scholarly report of the analysis

Furthermore, the results from the focus group and surveys underwent the same review process. When combining the surveys and focus group data from this specific project, the content theme method made pairing the literature themes with the survey/focus group themes quite simple.

Approach to the Survey and Focus Group with Sudbury Girls

For the purpose of this project, it was necessary to collect surveys and host a focus group to help learn more about the reasons females in the Sudbury area are not participating past grade 9 as well what could be done to help decrease this lack of

participation. Female students in grades 10 through 12 who were not enrolled in a PE class were recruited (Appendix A). The methods of collection and reasons why the study was being conducted was explained in information letters to participants and their parents (Appendix B). Additionally, consent forms were completed prior to any data collection (Appendix B). The project had participants complete a questionnaire pertaining to their current physical activity levels including fitness centre memberships, varsity sport participation, and local club sport participation (See Appendix C), as well as demographic details. Additionally, a one hour long semi-structured focus group was conducted with those who are currently not enrolled in PE classes. A semi-structured guide was utilized to direct and guide the focus group (See Appendix C). Each participant was asked to create their own pseudonym that was used throughout the document.

To ensure confidentiality, the school's identity was not disclosed at any point. Students' identities in both the surveys and the focus group were kept strictly confidential. The researcher is the only individual to have access to the answered surveys, focus group raw data and transcribed data. All data has been kept in a locked filing cabinet where only the researcher has access. The survey asked for the students' grade and school (not name) and was coded with a number system to ensure the security of their identity. Finally, pseudonyms were chosen by each participant in the focus group session to ensure their real identity was not disclosed. After five years the projects raw data will be destroyed. Participants also have the right to remove themselves from the study at any point with no penalty.

The focus group was designed to gain students opinions and experiences within PE. Not surprisingly, the results from the focus group reflected some of the current

literature on participation levels in physical education and physical activity. Additionally, this data contributed information to the current body of literature as the voices of these students will be heard, a population that is not present in the current literature. This data builds on the current literature as it provides insight into the barriers that some girls in the Greater Sudbury area faced (in 2012/2013) related to their decisions whether to register in senior PE classes or not. This is an important population because these voices are rarely heard due to geographical and political reasons. Sudbury is not a large urban area, nor is it a part of the rural north. However, it is a moderate size city that is a cultural transition point between these two areas; Sudbury has elements of the north as well as the urban south.

The opinions of the students are crucial if society wishes to improve physical activity rates. Physical education classes are some students' first and only exposure to physical activity and could shape their fitness habits for the future. These components are vital to bringing awareness, participation, and self-discipline into the lives of children and, even more importantly, teenagers. With health issues such as obesity, heart disease, osteoporosis and diabetes at epidemic levels (Robbins et al, 2005), physical activity is of utmost importance. Involvement in physical activity, including physical education classes, can help decrease these health issues.

Researcher Reflection

Creswell (2009) recommends that the researcher “reflexively identify their biases, values, and personal background, such as gender, history, culture, and socioeconomic status, that may shape interpretations formed during a study” (p. 177). In qualitative research the researcher is considered a key instrument within the study. The researcher(s) inject themselves into the project by collecting first-hand information through document examination, participant observation or personal/group interviews with participants (Creswell, 2009). The connections and relationships the researcher develops with the participants could lead to potential ethical, personal, or strategic issues arising within the study (Locke et al., 2007). With these risks in mind and the recommendations of past researchers (Creswell, 2009; Gibbons & Humbert, 2008; Locke et al., 2007; Yungblut et al., 2012) it is warranted to provide a reflection addressing personal characteristics and qualities that could affect this research project.

I am a white, middle-class, twenty-seven-year-old female who, at the time of data collection, has lived in Southern Ontario for most of my life. Throughout my childhood, I was always heavily involved in both competitive and recreational sport. I was a competitive gymnast for almost seventeen years and also coached. In the gymnastics off-season, I was a competitive power cheerleader, varsity flag football athlete and participated in swimming and soccer. In 2005, I graduated from high school and started Laurentian University’s Bachelor of Physical and Health Education degree, concentrating on Sport and Physical Education. After graduation in 2009, I completed a Bachelor of Education degree and received certification to teach grades 4-10 in health and physical education. Following the completion of Teachers College, I decided to pursue my

Master's degree in Interdisciplinary Health to complete research that could potentially help my future career in teaching.

My personal background has the potential to affect the collection of data, the information and comments of the participants and the overall analysis of results. Additionally, through this personal reflection I have become aware that my love of physical activity and sport could also have an impact to the project. I struggle with the idea that there are people, especially young people, who strongly dislike and avoid some or all types of physical activity. As such, while working through the project and writing this paper, I needed to constantly remind myself of these biases and tell myself that it is not fair to judge or be disappointed in people because they do not enjoy something as I do. Furthermore, some people, as seen throughout the research and personal discussions with the students, do not have positive experiences in physical activity and physical education, so it can be an even larger challenge or barrier to want to continue in the classes.

Throughout the focus group sessions, I did my best to be supportive of what the students were speaking about and avoided interjecting my thoughts and opinions as much as possible. I hoped this would avoid the students seeing my biases and true feelings regarding participation in physical activity and physical education. When I gave examples or tried to get more from certain discussion points, I offered them as suggestions and did not force things into the conversation. If the students liked what I suggested, I let them run with it, if they did not like it, I allowed the conversation to move in the direction they felt most appropriate.

During the writing phase of the project, I found it much simpler than I expected to be able to deliver information regarding the three themes, based on the literature and supported by the surveys and focus groups, without having my biases show through. I would read sections over and over to ensure I was speaking from the students perspectives. Additionally, as I hope this information will be looked at as a resource in why females are not participating in PE classes, I reminded myself that this is for the students and it is based on their personal experiences and feedback. It helped to keep things in check as I wrote.

Ethics

This project was approved by the Laurentian University Research Ethics Board as well as the Rainbow District School Board Ethics Committee. Final ethics approval from Laurentian University's REB was received on July 15th, 2011 (Appendix D). The final approval from Rainbow District School Board came on September 19th, 2011 (Appendix D).

Process Results

The main results of this project are included in the integrated results section of the paper. Key findings and examples from the surveys and focus group discussion were integrated into the common themes found throughout the literature. The process results will be broken down to describe key components of the literature, survey and focus group.

Literature

The search and review of literature was quite extensive. Throughout the writing process, the number of resources utilized in the document varied, until the final paper was completed. See below for a summary.

Summary of Resources:

Original number of resources found and reviewed	109 resources
Final number of resources used for project	57 resources
Number of resources Left unused	52 resources

Among the 57 resources used for this project, there were many topics discovered in the readings that indicated why female students were choosing not to participate in physical education classes, some of which included:

- Embarrassment
- Afraid of performing poorly
- Did not think they were good enough
- Did not want to sweat or get dirty
- Was not comfortable with having to change before/after class
- Did not want to participate with males

- Felt the classes were full of overly athletic girls
- Did not understand the rules of the game or sport
- Concerns of who was teaching the class
- Frustrated that they could not do the activities they wanted/liked
- Did not like the activities chosen
- Did not connect with the teacher

From here, the topics were grouped together to form the three themes of discussion in this paper. These three themes are the crux of the document and are reinforced by using examples from the focus group session held and surveys collected. The three overarching themes that were determined, and will be discussed later in the paper, are:

1. Body Image
2. Confidence in athletic abilities
3. Curriculum and teaching styles

Surveys

The survey consisted of nine questions (Appendix C) in which students answered to the best of their ability. As indicated above, students were recruited from a local high school. The recruitment process was quite challenging and lead to only 7 participants joining the study. The selection of participants was based on convenience and a teacher from the school assisted throughout the process. Students had the tendency to take a long time to return their consent forms, and worse, many did not return the document at all. Without active parental consent, as requested by Rainbow District School Board, a student could not participate so the amount of participants was lower than anticipated.

A brief summary of the answers is included below, but the important and relevant quotes from students' responses will be utilized within the integrated results section.

Summary of Participant Demographics of Survey:

Participant Number	Grade
121	10
122	10
123	11
124	12
125	12
126	12
127	12

Question 1 - WHAT PHYSICAL EDUCATION CLASSES HAVE YOU PARTICIPATED IN SINCE STARTING GRADE 9 (INCLUDE GRADE 9 CLASS)?

Completed Grade 9	Completed Grade 10	Completed Grade 11	Completed Grade 12
7	3	1	1

Question 2 - ARE YOU CURRENTLY PARTICIPATING (OR WILL BE NEXT SEMESTER) IN A PHYSICAL EDUCATION CLASS (INCLUDING HEALTH CLASSES)? IF YES, PLEASE LIST THE CLASSES.

Currently in a Physical Education Class	Taking a Physical Education Class Next Semester	Not taking a physical education class at all
0	3	4

Question 3 - DO YOU PLAY ON ANY HIGH SCHOOL SPORTS TEAMS? IF YES, PLEASE LIST THE TEAMS YOU PLAY ON.

Currently play on a High School team	Do not play on a High School team	Did not answer the question
1	5	1

Question 4 - DO YOU PARTICIPATE IN ATHLETICS OUTSIDE OF SCHOOL HOURS? IF YES, PLEASE LIST THE SPORTS AND CLUBS YOU PARTICIPATE IN.

Currently participate in athletics outside of school	Does not participate in athletics outside of school	Did not answer the question
1	5	1

Question 5 - DO YOU ATTEND A FITNESS CLUB (EXAMPLE: GOODLIFE). IF YES, PLEASE LIST THE CLUB(S).

Currently attends a Fitness Club	Does not currently attend a Fitness Club	Did not answer the question
2	4	1

Question 6 - DO YOU ENJOY PHYSICAL ACTIVITY WHEN IT IS NOT COMPLETED IN PHYSICAL EDUCATION CLASS? IF YES, WHY? LIST THE PARTS/TYPES OF PHYSICAL ACTIVITY YOU ENJOY.

Enjoys physical activity outside of PE classes	Does not enjoy physical activity outside of PE class	Did not answer the question
6	1	0

Question 7 – IF YOU ARE CURRENTLY (OR WILL BE NEXT SEMESTER) IN A PHYSICAL EDUCATION CLASS, WHY DID YOU CHOOSE TO REGISTER IN IT?

The 3 students that answered ‘YES’ to question 2 all enrolled in a yoga course for the following semester.

Question 8 – IF YOU ARE NOT IN A PHYSICAL EDUCATION CLASS, WHY DIDN’T YOU REGISTER FOR ONE?

All 7 participants answered this question, as they were not registered in a PE class at the time the survey was completed. These responses are used throughout the body of the paper.

Question 9 – ADDITIONAL COMMENTS:

Only one student provided additional comments and it was a thank you for delivering the survey and focus group.

Focus Group

The focus group session lasted one hour and six minutes and included seven participants total. The demographics of the participants are included in the chart below. Pertinent statements, examples and suggestions that relate to the themes of why females are not continuing in PE classes beyond grade 9 are included in the integrated results section.

Summary of Participant Demographics for Focus Group:

Pseudonym	Participant Number	Grade	Birth Year	Language Preference
Jessy	121	10	1997	English
B	122	10	1997	English
Sophie	123	11	1996	English
Jrobbs	124	12	1994	French
Lulu	125	12	1995	English
Emily	126	12	1994	English
Lilith	127	12	1994	English

Integrated Results

Participation Barriers for Girls and Physical Education

Body Image.

The review of literature demonstrates that adolescent girls do recognize that physical activity will help to develop and maintain a healthy body however; the desire to attain an attractive body through physical activity can also lead to further body image issues (Gibbons & Humbert, 2008). Many female students struggle with PE classes because of their concern of disrupting their make-up by sweating and therefore may look less feminine or attractive (Greenockle, Lee, & Lomax, 1991). Girls often feel the need to look good all the time and fear that male classmates will find them unattractive and masculine if they sweat or do not wear makeup (Cockburn & Clarke, 2002; Olafson, 2002).

This concern with regards to appearance also extends to the body. Young women also focus on their body and attempt to control it while participating in PE to avoid looking funny (Olafson, 2002).

This was supported by one of the participants from Sudbury who indicated that she does not “enjoy running around a hot gross gym with a bunch of sweaty kids chasing a ball” (Participant 122, survey, November 16, 2012). The students want to stay healthy and ensure they are learning skills to help keep participation going throughout life, but are uncomfortable with how they need to do this. The discomfort and uneasy feeling they have when sweating in front of others overpowers the need and desire to play. If educators consider these issues of body image and self-confidence while planning the

content, these concerns may be able to be avoided if other activities and/or delivery methods are considered.

Female participants from the Greater Sudbury area also articulated their concern with regards to body image and self-confidence. Some of the girls felt as though they were always being stared at and “being watched” when they were in PE classes and this made them uncomfortable (B and Sophie, focus group, November 16, 2012). The students struggle to understand how some continue to look so good when participating in a gym class (Emily, focus group, November 16, 2012).

One way to alleviate these self-conscious feelings is the implementation of uniforms. Participants indicated that by having mandatory uniforms for PE class this would help to make things equal. Without mandatory uniforms it shows that “those are the athletic girls and those aren’t”, it “singles individuals out”, and is “like walking around with a big sign saying look what I have and you don’t” (Lilith, focus group, November 16, 2012). The majority of participants commented that the athletic girls would always wear their team uniforms or championship shirts, and that created a lot of negative emotions towards attending the gym classes (Emily, Lilith and Sophie, focus group, November 16, 2012). By implementing mandatory physical education class uniforms it could help to eliminate this feeling of hierarchy or athletic versus non-athletic that the participants in Sudbury are feeling. It can avoid the obvious sightings of people who play on school and/or club teams, and bring people back to a more level playing field.

The participants in the project also indicated that the ability to be healthy does not necessarily start with physical activity, but starts with being satisfied with who you are.

The students expressed the need to be more educated in the areas of self-esteem, confidence, and personal happiness before they begin participating in sports and physical activity that only hinder or decrease these areas. Lilith spoke strongly about the need to work on this with students, especially female ones:

“If the biggest issues in grade 9, especially for girls, is self-esteem, one of the things I’ve been wanting to get into cuz my younger sister is in elementary school, is maybe instead of throwing you into gym in grade 9, is have a self-esteem workshop, have like a self-esteem fitness, call it love your body. Get them used to it, allow them to adapt to the changes that are happening” (Focus Group, November 16, 2012).

Another student supported this suggestion and recommended that students have the choice, “I feel like the student should have the option if the students aren’t confident with their body they can take that instead of gym class until they are comfortable with it” (Emily, focus group, November 16, 2012). This theme came up throughout the discussion, and all participants agree that they need more in grade 9 that can help with all of the transitions they are experiencing.

Confidence in Athletic Abilities.

Gibbons and Humbert (2008) have problematized the male oriented physical education class and curriculum’s focus on evaluation and skills assessment. Forms of evaluation and the need for skill development can make girls feel self-conscious especially when they are required to perform an activity or participate in a game in which they perceived themselves to be less skilled (Flintoff & Scraton, 2001). The student’s ability directly affects how she feels about performing in front of the class and potentially

what the outcome of the performance will be. Girls may also feel the need to impress boys in a co-educational class with their athletic skills (Osborne et al., 2002). Thus, lack of athletic abilities may cause female students to be nervous to participate in physical education classes.

This was further supported through the participant surveys collected. One student described how the grade 9 gym class made her lose confidence in herself because she was with other athletic girls (Participant 123, survey, November 16, 2012). It impacted her so much so, that she never enrolled in another physical education class.

The competitive nature of a physical education class can impact girls' level of comfort and therefore have a negative impact on their experience in PE class. A highly competitive atmosphere in a physical education class limits students' potential to socialize with their friends (Smith & St. Pierre, 2009). Several of the participants indicated that they also do not like the competitiveness in their PE classes and the emphasis on athletic ability rather than participation and effort (Emily, Participant 123 and Sophie, survey and focus group, November 16, 2012).

One student described how participation in the grade 9 PE class made her lose confidence in her abilities because there were athletic girls in the class who were far better at the sports and activities than she was:

“I chose not to take phys-ed because after doing gym all through elementary and always being below average I had come to the conclusion that low organized sports will not help me in my 30's. I enjoy being active and I don't need to be taught how” (Participant 127, survey, November 16, 2012).

As such, she never enrolled in another PE class for the rest of her high school career.

Curriculum and Teaching Styles.

What seems to be the most important factor impacting the rate of participation in PE classes for females are the curriculum content and delivery methods (Smith & St. Pierre, 2009; Stelzer, Ernest, & Fenster, 2004). The teacher's role in a PE class is very important but also has the opportunity to shape the students opinions and experiences. When teachers provide instruction in an enthusiastic, caring and outgoing way, students respond positively and their enjoyment is enhanced (Smith & St. Pierre, 2009). One participant, Sophie, indicated that the PE teacher should be "a role model and confidant" (Focus group, November 16, 2012). When enthusiasm is present, students can see the passion and excitement the teachers have for PE and many feel more inclined to participate (Smith & St. Pierre, 2009).

Furthermore, when teachers participate in the activities students tend to find much amusement (Smith & St. Pierre, 2009). This was supported by statements from participants, including Jessy who explained that a teacher should be "understanding and participate in the class" (Focus group, November 16, 2012). Feedback is necessary for improvement in the activities; however, positive, constructive feedback helps to provide the students with a better learning experience. A final impact teachers can have on a PE class is how the individual instructs the class. Students have identified the need for teachers to be organized, teach at the level of the class, and avoid constant student demonstrations (Smith & St. Pierre, 2009).

In a physical education class, the teacher is the starting and ending point for all students. The teachers must focus on the instructions given, the feedback in order to improve students' skills, and the evaluation so students understand how they are

performing in the course. Since the class starts and ends with the teacher, it is vital that that individual focuses on the needs of each student and builds their personal skills to deliver a class/activity in an effective way. The impact that the teacher has can be detrimental to the impressionable adolescents in the class, so much so that it can help them to fall in love or in hate with the notion of physical education/activity.

A students' survey indicated her lack of participation in all PE classes because she "does not like the teachers who teach gym classes here" (Participant 125, survey, November 16, 2012). Overall, it is important for the PE educators to be motivating and enthusiastic in class, to help all students, but especially those who may be less confident in their abilities, succeed in learning necessary skills to stay active and healthy in the future.

In addition to the teacher, the content of what is taught in a PE class is vital to the enjoyment of the students. Many students do not enjoy the activities that are part of the PE curriculum (Gibbons & Humbert, 2008; Olafson, 2002; Osborne et al., 2002). A variety of activities and the ability to have input into what types of sports and activities are offered are important to students (Gibbons & Humbert, 2008). Students seem to be dissatisfied with the offerings in class, and want a wider range of activities. Gibbons & Humbert's (2008) research found that students were always being told what to do and what they should be interested in doing, but in fact there are sports such as basketball, volleyball, etc. that they feel unmotivated to participate in. Additionally, certain sports, including soccer, basketball and flag football, require physical contact. As such, there can be apprehension from females to participate with their male classmates (Osborne et al., 2002). This apprehension stems from the concern of some sports being too rough for

females and that boys may be better suited for such activities because they are able to be rough (Osborne et al., 2002). This was supported by Participant 125, who said she “does not enjoy being told what to do” in the class, but does enjoy being active through activities such as “jogging, swimming and biking” (Survey, November 16, 2012).

The problem is further exacerbated when male PE teachers ignore the sports/activities requests of the female students in favour of the male students demands (Gibbons & Humbert, 2008). This can lead to the activities being very one sided, and possibly very physical, which based on some of the reflections and reviews above, is not something all students enjoy.

The participants felt it was unfair when only certain opinions of activities are taken into consideration; Lilith wanted the teacher to “give equal treatment” to all participants, and it would lead to more confidence and higher participation rates in class (Focus group, November 16, 2012). For example, participants in this project indicated that they enjoyed low intensity sports, such as hiking, swimming and paddle boarding, which did not necessarily require specific skills to be taught, learned and then mastered (Emily, Lilith, and Sophie, focus group, November 16, 2012). The idea of having classes like yoga excited them, and they wanted more classes to become available (Emily and Sophie, focus group, November 16, 2012). Emily commented that it would be fun to “have a class where all they did was a different work out video every day” including Zumba, Pilates, body pump, etc. (Focus group, November 16, 2012). The surveys echoed these sentiments and expressed excitement over the opportunity to engage in diverse forms of physical activity in PE class, especially when they were able to provide input on the curriculum, “it is the kind of physical education class I wanted” (Participant 122,

survey, November 16, 2012). Consistent with the literature, participants wanted the curriculum to be geared more to what the students wanted and enjoyed and this would potentially encourage them to enroll in future PE classes (Emily and Jrobbs, focus group, November 16, 2012). Thankfully, it seems the 2015 PE curriculum has started to address this concern and has recognized that increased participation rates and engagement will come with implementing certain activities that are of interest to the students.

When asked to describe their ideal gym class, participants suggested that PE classes be separated into an academic and an applied component. Participants recommended that athletes or highly skilled students would enroll in an advanced class where they can be competitive and focus on sports, whereas the non-athletes, or less skilled students would enroll in a class that would allow them to participate in non-competitive activities without feeling pressure from classmates (B, Emily, Jessy, Lilith, Lulu and Sophie, focus group, November 16, 2012). This would also help to alleviate stress that students feel who do not have strong athletic background or skills compared to their classmates. For example, some suggested activities such as going on hikes, taking trips to places like the YMCA, swimming, or anything that takes advantage of the outdoors, including kayaking or canoeing (Emily, Lilith and Sophie, focus group, November 16, 2012). Emily commented that she

“Hears a lot of teachers saying ‘we’re setting you up to have a healthy life’. Well if you want us to live a healthy life and for it to be the base to start and continue for the rest of our lives then don’t show us basketball...I love hiking, I would go hiking with my friends. No one is ever gunna say I’m gunna play dodgeball in

my backyard with my friends, like who does that” (Focus group, November 16, 2012).

Participants recommended that if the curriculum is intended to promote life-long healthy living, then there should be a focus on food and nutrition incorporated into PE classes.

Classes could walk to a grocery store, and the students could learn how to select and cook healthy foods (Emily and Sophie, focus group, November 16, 2012).

Conclusion

Statistics have shown that female students are currently not participating in high school physical education classes beyond the mandatory grade 9 gym classes. The review of literature, surveys and focus group was crucial in learning the reasons this is occurring. Physical education classes are some students' first and only exposure to physical activity and it could help to shape their fitness habits for the future. The classes could be considered vital to bringing awareness, participation, and self-discipline into the lives of children, and more importantly, teenagers. With health issues such as obesity, heart disease, osteoporosis and diabetes at epidemic levels (Robbins, Powers, & Burgess, 2005), knowledge and participation in physical activity and education is of the utmost importance. Involvement in physical activity, including well-rounded gym and health classes, can help to decrease these health concerns.

If we consider what the survey and focus group participants mentioned regarding self-esteem and body image, then after students have been exposed to and hopefully learned the necessary skills to cope with whom they are, and some of the experiences they may have, then we can move towards the activity part of physical education classes in high school. Based on the extensive literature review, and supporting evidence from the focus group and surveys, students are not necessarily finding satisfaction and usefulness in the basketball, soccer and volleyball based gym classes. Female students want to move beyond the typical team sports to less intensive and more self-focused activities.

Taking time to understand the point of views of the students only increases our ability to offer what they need in order to stay healthy. Basketball may be the answer for some students, but yoga or paddle boarding might fit other's needs. Educators need to take the time to hear the individual needs and adapt teaching and classes to address more diversity. Activities can be combined in new ways to cater to more students and show them how to be active while having fun.

Future Directions

The purpose of this project is to understand why high school girls do not enroll in PE classes beyond the mandatory grade 9 class. Three main themes were discovered as to why they are choosing not to continue in the classes; body image, confidence in athletic abilities, and curriculum and teaching styles. The single focus group proved to be very insightful and consistent with other researchers' findings, but further research could be completed at other schools to see if there are more consistent findings. This was the original intention, as it was hoped that more students would want to participate in the pilot project. Having the request to receive parental consent passively denied, made the ease of collection and participation much more challenging. This was a limitation to the size of the pilot project.

If more focus groups are conducted, additional data in regards to what works and does not work in Sudbury will be collected. With the new PE curriculum content, it would be interesting to connect with students to see if the findings are still the same, or if the engagement, participation and enjoyment of PE classes have increased. With physical activity, especially for students, reducing anxiety and depression as well as improving mood and psychological well-being (Robbins et al., 2005), it can be assumed that participation will ultimately lead to increased enjoyment and success in the school environment. These factors alone demonstrate the importance of keeping students in physical education classes.

The results have been shared with Rainbow District School Board and the participating school from Sudbury, Ontario. It is hoped that the board and school will review these findings and share it among the physical education instructors. It may be

possible to use the data when it comes time to plan their courses each semester, and the content of them. The research gives a fresh perspective on what students see as successful/non-successful and enjoyable/non-enjoyable in a classroom.

Additionally, after reviewing the current focuses of organizations such as the Ontario Physical and Health Education Association (OPHEA) and Physical and Health Education Canada (PHE Canada), it is apparent that this topic area (reasons female students are not participating in PE classes) is not being addressed, seemingly at any level. A personal communication with the President of PHE Canada, Fran Harris, indicated:

“This topic has not been discussed at our Board meetings - we don't tend to get into specific issues like that. The Council of Provinces and Territories might and then make recommendation to us. Nothing has come forward from them concerning this. Looking at the Conference program in Banff, I found no sessions on this either.

Here in NB we now offer a Wellness course instead of PE for our grade 11 & 12 and this has received positive results. Many schools are also offering a Yoga course as an elective and again this has been a successful outcomes, especially for girls” (June 1, 2015).

While the new PE curriculum introduced in early 2015 should help the participation rates in classes beyond those that are mandatory, it is important that we address the concerns of students on a provincial and possibly national scale to ensure students get what they want and need from PE classes to ensure they move towards life-

long participation in activity. The results of this project will also be sent to OPHEA and PHE Canada to see if they would like to pursue further research related to this topic.

Recommendations

For the purpose of this project, giving a brief summary of the recommendations could prove to be quite valuable. Based on the three themes discovered throughout the literature review and pilot project, there are many recommendations that could be made. The participants in the surveys and focus groups did help to articulate these ideas throughout their discussions, and so the recommendations are adapted from their ideas.

Body Image Recommendation

It is necessary for girls to start feeling more comfortable with who they are in order to be confident in what they are doing. The idea of creating a more tailored course to that of body image and those topics associated to it could be very beneficial to the students. The school board could look at integrating this into the PE curriculum as a mandatory course in grade 9 that helps teach students the skills necessary to be happy with who they are. Following this course, in grade 10, a more 'physical' class could be required to get students participating in physical activity and learning how to combine a positive self image with sport and activity participation.

Confidence in Athletic Abilities Recommendation

The fear of not performing well enough and being competitive enough is quite evident based on the comments in the integrated results section. The assessment of students in PE classes has the ability to impact their overall confidence. If a student's performance is evaluated as poor because they do not have the skills for a certain sport it leads to a lack of desire to participate in activity in the future. The better option may be to consider participation rates, positivity, effort put into the activity and individual improvement from the start of an activity to the end. This eliminates the fear of not

knowing how to serve in volleyball or do a corner kick in soccer, and focuses on the individual's improvement from day 1 to day X instead.

Curriculum Content and Teaching Style Recommendation

While the participants brought up the suggestion of separating PE classes into an academic or applied stream, there could be fear of this causing even more segregation or labeling of the students who are participating in the less-competitive or applied stream of PE. The better option that comes from reviewing what the literature and participants are saying is that of courses designated to specific types of activities. For example, schools could deliver the more traditional classes that tend to follow past practices, such as basketball, volleyball and soccer, but then also offer alternative classes that focus on more active living and/or personal activities. This second set of classes could follow some of the recommendations of the pilot project participants such as hiking, fitness videos/workouts, yoga, etc. This could satisfy both groups of students without knowingly segregating them into academic and applied streams that identify them ahead of time as skilled and less-skilled students. The new PE curriculum has already begun addressing this need for change of traditional PE classes (delivery of a new sport, such as basketball, every two weeks of class) with focus courses in certain areas of sports and activities.

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Appendices

***Keeping Girls in the Gym:
An Examination of the Reasons Why Females
Choose Not to Continue in High School
Physical Education***

Group Discussion Session

See Mrs. LeBreton for forms

**Who: Grade 10, 11, and 12 female students NOT in
physical education classes this year**

How many: 2-4 from each grade

What: 45-60 minute discussion group

Where: Lasalle Secondary School

**Why: To learn why you are not continuing in
physical education classes**

**** Note: snacks/lunch will be provided ****

For questions or concerns, please contact:

**Brady Trombly (researcher)
bx_trombly@laurentian.ca**

**Dr. Amanda Schweinbenz (advisor)
aschweinbenz@laurentian.ca**

**Dr. Jean Dragon (ethics committee)
jdragon@laurentian.ca**

Appendix B – Letters of Information and Consent

Letter of Information – Student.



Laurentian University
Université Laurentienne

Study Title: Keeping Girls in the Gym: An Examination of the Reasons why Females Choose Not to Participate in High School Physical Education

Letter of Information

You are being invited to participate in a research project that will examine why female high school students choose not to participate in physical education after they have completed their required grade 9 class. Your participation will provide important information on your interests, preferences and experiences of the current physical education curriculum. The findings will be used to give a summary to your school and the school board. If you agree to participate in this project, you will be asked to complete a short questionnaire that will ask you about your current participation in physical education, recreation, and sport. The questionnaire should take no longer than 15 minutes to complete.

Additionally, I am inviting those of you who are NOT currently registered in a physical education class to participate in a further group discussion about high school physical education. During this group discussion, I will be asking participants to discuss their experiences and feelings regarding high school physical education. This group discussion will take place at a later date and I will contact you directly to arrange an appropriate time to meet.

All of your information will be kept confidential; your name will never appear in any reports or published articles. Your participation is strictly voluntary and you can refuse to participate at any time. As well, you can withdraw from the study at any time without any penalty of any kind. There is minimal risk associated with this study and if you feel uncomfortable answering any of the questions in the survey, you are free to not respond. All of the information collected from the surveys will be stored in a locked filing cabinet in a locked office and through password protection on the computer. Five years after the completion of the study data will be shredded and disposed of.

The results of this study will be used to inform physical educators, schools and curriculum specialists on those areas that students, like you, feel are important in an ideal physical education class. Additionally, at the end of the project, I will send you a summary of the results of this study if you wish.

If you have any questions regarding your rights as a participant, please contact:

Jean Dragon
Research Activities Manager
Office of Research, Development and Creativity
Laurentian University
(705) 675-1151, extension 3213

If you wish to participate in this study please complete the consent form. Included in this package is a letter of information and a consent form for your parents or guardians. If your parents/guardians agree in your participation in this study then they need to complete and return the form as soon as possible to the school. If your parents/guardians wish to refuse your participation in this study they will do so by not returning the form at all. For additional information, questions or concerns please contact Ms. Brady Trombly, BPHE, or Dr. Amanda Schweinbenz at:

Brady Trombly, BPHE, Masters Student, School of Human Kinetics, Laurentian University, email bx_trombly@laurentian.ca

Dr. Amanda Schweinbenz, Associate Professor, School of Human Kinetics, Laurentian University, (705) 675-1151 ext 1084 or email aschweinbenz@laurentian.ca

Letter of Information – Parent.



Laurentian University
Université Laurentienne

Study Title: Keeping Girls in the Gym: An Examination of the Reasons why Females Choose Not to Participate in High School Physical Education

Letter of Information

Your daughter is being invited to participate in a research project that will examine why female high school students choose not to participate in physical education after they have completed their required grade 9 class. Her participation will provide important information on her interests, preferences and experiences of the current physical education curriculum. The findings will be used to give a summary to the school and the school board. If she agrees to participate in this project, she will be asked to complete a short questionnaire that will ask her about her current participation in physical education, recreation, and sport. The questionnaire should take no longer than 15 minutes to complete.

Additionally, I am inviting students who are not registered in a physical education class to participate in a further group discussion about high school physical education. During this group discussion, I will be asking your daughter to discuss her experiences and feelings regarding high school physical education. This group discussion will take place at a later date and I will contact your daughter directly to arrange an appropriate time to meet.

All of your daughter's information will be kept confidential; her name will never appear in any reports or published articles. Your daughter's participation is strictly voluntary and she can refuse to participate at any time. As well, she can withdraw from the study at any time without any penalty of any kind. There is minimal risk associated with this study and if she feels uncomfortable answering any of the questions in the survey, she is free to not respond. All of the information collected from the surveys will be stored in a locked filing cabinet in a locked office and through password protection on the computer. Five years after the completion of the study data will be shredded and disposed of.

The results of this study will be used to inform physical educators, schools and curriculum specialists on those areas that students, like your daughter, feel are important in an ideal physical education class. Additionally, at the end of the project, I will send your daughter a summary of the results of this study if she wishes.

If you have any questions regarding your daughter's rights as a participant, please contact:

Jean Dragon
Research Activities Manager

*Office of Research, Development and Creativity
Laurentian University
(705) 675-1151, extension 3213*

If you wish to allow your daughter to participate in this study please complete the consent form. Included in this package is a consent form, which needs to be completed and returned if you agree in your daughter's participation in the project. Once the form is completed please have your daughter return it to the school as soon as possible. If you would like to refuse your daughters participation in this study then do so by not returning the form at all. For additional information, questions or concerns please contact Ms. Brady Trombly, BPHE, or Dr. Amanda Schweinbenz at:

Brady Trombly, BPHE, Masters Student, School of Human Kinetics, Laurentian University, email bx_trombly@laurentian.ca

Dr. Amanda Schweinbenz, Associate Professor, School of Human Kinetics, Laurentian University, (705) 675-1151 ext 1084 or email aschweinbenz@laurentian.ca

Parental Consent Forms.



Laurentian University
Université Laurentienne

Study Title: Keeping Girls in the Gym: An Examination of the Reasons why Females Choose Not to Participate in High School Physical Education

Researcher

Brady Trombly
School of Human Kinetics
Laurentian University
bx_trombly@laurentian.ca

Supervisor

Dr. Amanda Schweinbenz
School of Human Kinetics
Laurentian University
aschweinbenz@laurentian.ca
(705) 675-1151 Ext. 1084

Your daughter is invited to participate in a research project that will examine why female high school students choose not to participate in physical education after they have completed their required grade 9 class. Her participation will provide important information on her interests, preferences and experiences of the current physical education curriculum. The findings will be used to give a summary to the school and the school board. If she agrees to participate in this project, she will be asked to complete one or both of the following tasks. A short questionnaire will be distributed that will ask her about her current participation in physical education, recreation, and sport. The questionnaire should take no longer than 15 minutes to complete. The second portion of the study includes only those students currently NOT enrolled in a physical education class. Your daughter would participate in a further group discussion about high school physical education. During this group discussion, I will be asking participants to discuss their experiences and feelings regarding high school physical education. This group discussion will take place at your high school and should last between 45 and 60 minutes.

All of your daughter's information will be kept confidential; her name will never appear in any reports or published articles. Although it cannot be guaranteed all participants will be encouraged to keep the points of discussion from the focus group confidential from those who did not participate. Her participation is strictly voluntary and she can refuse to participate at any time. As well, she can withdraw from the study at any time without any penalty of any kind. There is minimal risk associated with this study and if your daughter feels uncomfortable answering any of the questions, she is free to not respond. All of the information collected from the surveys and discussions will be stored in a locked filing cabinet in a locked office and through password protection on the computer. Five years after the completion of the study data will be shredded and disposed of.

The results of this study will be used to inform physical educators, schools and curriculum specialists on those areas that students, like you, feel are important in an ideal

physical education class. Additionally, at the end of the project, I will send you a summary of the results of this study if you wish. If you have any questions or concerns regarding this study or your daughter's participation, please feel free to contact Ms. Brady Trombly or Dr. Amanda Schweinbenz.

If you have any questions regarding your daughter's rights as a participant, please contact:

Jean Dragon
Research Activities Manager
Office of Research, Development and Creativity
Laurentian University
(705) 675-1151, extension 3213

Sincerely,

Brady Trombly (MHK)
Laurentian University

I agree to allow my daughter to participate in the survey portion of this study. I have received and read a copy of the letter of information. If you would like a copy of the results please include your email as well.

Name of Parent/Guardian

Signature of Parent/Guardian

Date

E-mail

I agree to allow my daughter _____, who is currently NOT enrolled in physical education classes, to participate in the group discussion portion of this study. I have received and read a copy of the letter of information. If you would like a copy of the results please include your email as well.

Name of Parent/Guardian

Signature of Parent/Guardian

Date

E-mail

Student Survey Consent Form.



Laurentian University
Université Laurentienne

Study Title: Keeping Girls in the Gym: An Examination of the Reasons why Females Choose Not to Participate in High School Physical Education

Researcher

Brady Trombly
School of Human Kinetics
Laurentian University
bx_trombly@laurentian.ca

Supervisor

Dr. Amanda Schweinbenz
School of Human Kinetics
Laurentian University
aschweinbenz@laurentian.ca
(705) 675-1151 Ext. 1084

You are being invited to participate in a research project that will examine why female high school students choose not to participate in physical education after they have completed their required grade 9 class. Your participation will provide important information on your interests, preferences and experiences of the current physical education curriculum. The findings will be used to give a summary to your school and the school board. If you agree to participate in this project, you will be asked to complete a short questionnaire that will ask you about your current participation in physical education, recreation, and sport. The questionnaire should take no longer than 15 minutes to complete.

All of your information will be kept confidential; your name will never appear in any reports or published articles. Your participation is strictly voluntary and you can refuse to participate at any time. As well, you can withdraw from the study at any time without any penalty of any kind. There is minimal risk associated with this study and if you feel uncomfortable answering any of the questions in the survey, you are free to not respond. All of the information collected from the surveys will be stored in a locked filing cabinet in a locked office and through password protection on the computer. Five years after the completion of the study data will be shredded and disposed of.

The results of this study will be used to inform physical educators, schools and curriculum specialists on those areas that students, like you, feel are important in an ideal physical education class. Additionally, at the end of the project, I will send you a summary of the results of this study if you wish.

If you have any questions or concerns regarding this study, please feel free to contact Ms. Brady Trombly or Dr. Amanda Schweinbenz.

If you have any questions regarding your rights as a participant, please contact:

Jean Dragon
Research Activities Manager
Office of Research, Development and Creativity
Laurentian University
(705) 675-1151, extension 3213

Sincerely,

Brady Trombly (MHK)
Laurentian University

I wish to participate in this study by completing the questionnaire and I have received a copy of the letter of information.

Name of Participant

Signature of Participant

Date

I am NOT registered in a physical education class and would therefore like to participate in the second phase by attending a group discussion regarding physical education classes.

Name of Participant

Email of Participant

Signature of Participant

Date

I would like to receive a summary of the results following the completion of this study.

Name of Participant

Email of Participant

Signature of Participant

Date

Student Focus Group Consent Form.



Laurentian University
Université Laurentienne

Study Title: Keeping Girls in the Gym: An Examination of the Reasons why Females Choose Not to Participate in High School Physical Education

Researcher

Brady Trombly
School of Human Kinetics
Laurentian University
bx_trombly@laurentian.ca

Supervisor

Dr. Amanda Schweinbenz
School of Human Kinetics
Laurentian University
aschweinbenz@laurentian.ca
(705) 675-1151 Ext. 1084

You are being invited to participate in a research project that will examine why female high school students choose not to participate in physical education after they have completed their required grade 9 class. Your participation will provide important information on your interests, preferences and experiences of the current physical education curriculum. The findings will be used to give a summary to your school and the school board. If you agree to participate in this portion of the project, you will be asked to participate in a further group discussion about high school physical education. During this group discussion, I will be asking participants to discuss their experiences and feelings regarding high school physical education. This group discussion will take place at your high school and should last between 45 and 60 minutes.

All of your information will be kept confidential; your name will never appear in any reports or published articles. Although this cannot be guaranteed all participants will be encouraged to keep the points of discussion confidential from those who did not participate. Your participation is strictly voluntary and you can refuse to participate at any time. As well, you can withdraw from the study at any time without any penalty of any kind. There is minimal risk associated with this study and if you feel uncomfortable answering any of the questions, you are free to not respond. All of the information collected from the discussions will be stored in a locked filing cabinet in a locked office and through password protection on the computer. Five years after the completion of the study data will be shredded and disposed of.

The results of this study will be used to inform physical educators, schools and curriculum specialists on those areas that students, like you, feel are important in an ideal physical education class. Additionally, at the end of the project, I will send you a summary of the results of this study if you wish.

If you have any questions or concerns regarding this study, please feel free to contact Ms. Brady Trombly or Dr. Amanda Schweinbenz.

If you have any questions regarding your rights as a participant, please contact:

Jean Dragon
Research Activities Manager
Office of Research, Development and Creativity
Laurentian University

(705) 675-1151, extension 3213

Sincerely,

Brady Trombly (MHK)
Laurentian University

I wish to participate in the group discussion portion of this study and I have received a copy of the letter of information. If you would like a copy of the results please include your email as well.

Name of Participant

Signature of Participant

Date

Email of Participant

Appendix C – Survey and Focus Group Guiding Questions

Survey.



KEEPING GIRLS IN THE GYM: AN EXAMINATION OF THE REASONS WHY FEMALES CHOOSE NOT TO PARTICIPATE IN HIGH SCHOOL PHYSICAL EDUCATION

INSTRUCTIONS:

Please circle the answer best suited to you. If you circled the response 'yes' please provide some additional information in each space provided. In order to ensure confidentiality, you do not need to record your name on this survey.

Date: _____

School: _____

Grade: _____

1. What physical education classes have you participated in since starting grade 9 (include grade 9 class)?

2. Are you currently participating (or will be next semester) in a physical education class (including

Health classes)?

Yes

No

If yes, list the name of the course(s). _____

3. Do you play on any high school sports team? Yes No

If yes, list the teams you play on. _____

4. Do you participate in athletics outside of school hours? (Examples: Chill Volleyball, Sudbury Laurels

Gymnastics) Yes No

If yes, list the sports and clubs you participate in. _____

5. Do you attend a fitness club? (Example: GoodLife) Yes No

If yes, list the name(s) of the club(s). _____

6. Do you enjoy physical activity when it is not completed in physical education class? Yes No

If yes, why? List the parts/types of physical activity you enjoy. _____

7. If you are currently (or will be next semester) in a physical education class, why did you choose to register in it?

8. If you are NOT in a physical education class, why didn't you register for one?

9. Additional Comments:

Thank you for your participation in this survey. Your answers will be kept strictly confidential. If you wish to remove yourself from this study please contact the researcher, Ms. Brady Trombly (see information letter).

Focus Group Guiding Questions.

1. Tell me about your experiences with physical education/physical activity. What kind of activities do you enjoy doing?
2. Tell me about your grade 9 physical education class.
3. Did your elementary school physical education classes affect your opinions about high school physical education?
4. Why did you choose not to register in a physical education class?
5. Would you be more willing to join a physical education class if it was at your level of physical activity? For example: having a beginner, moderate and advanced physical education class.
6. Are there any activities or sports you dislike within a physical education class – do they affect your choice of dropping out of gym class?
7. Are there any activities or sports you thoroughly enjoy which would encourage you to join a physical education class?
8. What would be involved in your ideal physical education class?
9. If your ideal class did exist, would you enroll in the class?
10. Anything else you would like to comment on?

Appendix D – Ethics

Laurentian University Ethics Approval.



APPROVAL FOR CONDUCTING RESEARCH INVOLVING HUMAN SUBJECTS Research Ethics Board – Laurentian University

This letter confirms that the research project identified below has successfully passed the ethics review by the Laurentian University Research Ethics Board (REB). Your ethics approval date, other milestone dates, and any special conditions for your project are indicated below.

TYPE OF APPROVAL	New		Modifications to project	X	Time extension	X
Name of Principal Investigator and school/department	Brady Trombly (Amanda Schweinbenz; supervisor) — Human Kinetics (LU)					
Title of Project	Dropping out of Gym: An Examination of the Reasons Why Females Drop Out of High School Physical Education					
REB file number	2010-12-13 R1					
Date of original approval of project				February 4 th 2011		
Date of approval of project modifications or extension (if applicable)				July 15 2011 (R1)		
Final/Interim report due on				July 15 2012		
Conditions placed on project	Final or interim report on July 15 2012					

During the course of your research, no deviations or changes to the protocol, recruitment or consent forms may be initiated without prior written approval from the REB. If you wish to modify your research project, please complete the appropriate [REB form](#).

All projects must submit a report to REB at least once per year. If involvement with human participants continues for longer than one year (e.g. you have not completed the objectives of the study and have not yet terminated contact with the participants, except for feedback of final results to participants), you must request an extension using the appropriate [REB FORM](#).

In all cases, please ensure that your research complies with the [Tri-Council Policy Statement \(TCPS\)](#). Also please quote your REB file number on all future correspondence with the REB office.

Congratulations, and best of luck in conducting your research.

Jean Dragon Ph.D. (Ethics officer LU) for Susan James Ph.D.
Acting Chair of the *Laurentian University Research Ethics Board*
Laurentian University

Rainbow District School Board Ethics Approval.

RECEIVED 09/19/2011 15:20 7056716603
09/19/11 MON 15:21 FAX 1 705 674 3167 RAINBOW DSB

SRNH

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69 Young Street, Sudbury, Ontario P3E 3G5 | Tel: 705.674.3171 | Toll Free: 1.888.421.2661 | rainbowschools.ca

September 19, 2011

Brady Trombly
379 Van Horne Street
Sudbury, ON
P3B 1J2

Dear Brady Trombly:

The purpose of this letter is to inform you that your Research Project Proposal entitled "**Dropping Out of Gym: An Examination of the Reasons Why Females Drop out of High School Physical Education**" has been approved.

Rainbow District School Board permits you to contact the school principal in order to present your proposal. The principal has the final authority to allow research in his/her school.

All on-site data collectors/facilitators need a current criminal record check on file with my office prior to entry to any school.

The Education Research Council would appreciate receiving a copy of your completed research project so that we might ascertain its impact in our school system.

Sincerely,

A handwritten signature in black ink, appearing to read "Sharon Speir".

Dr. Sharon Speir
Superintendent of Schools
Rainbow District School Board
speirs@rainbowschools.ca

Encl. (1)