EIGHT NOVICE PHE TEACHERS’ PERCEPTIONS OF ENGAGING
ADOLESCENT GIRLS IN THEIR CLASSROOMS

by

Caitlin S. Tino

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ABSTRACT

This qualitative study aimed to understand how new secondary school teachers (in years 0-5) approach the teaching of adolescent females in their physical education classes. As there is a significantly greater decline in the enrollment of adolescent females participating in physical education compared to males once the choice to participate becomes elective, Physical and Health Education (PHE) teachers are challenged in their teaching and assessment practice to motivate adolescent girls. Eight PHE teachers (four female, four male) were interviewed about their approaches in physical education classes with a particular emphasis on their interactions with adolescent girls. These teachers relied largely on their cumulative life experiences prior to entering teacher education to structure their classrooms. While these PHE teachers had some understanding about adolescent girl behaviour within their classrooms, they were not deliberate in their teaching and assessment practices for this population. They tended to view their practices through a gender-neutral lens (“gender blindness”), while holding gender stereotypes about motivations of girls and boys. The findings from the study highlight the complexity of addressing the needs of adolescent girls in PHE, and the importance of developing intervention strategies so that research may be disseminated to new PHE teachers and implemented in their classes to effect change.
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TABLE OF CONTENTS

ABSTRACT ............................................................................................................................ ii
ACKNOWLEDGMENTS........................................................................................................... iii
TABLE OF CONTENTS ........................................................................................................ iv
CHAPTER 1: INTRODUCTION ........................................................................................... 1
  Purpose of the Study ........................................................................................................... 2
  Rationale ............................................................................................................................. 2
  Theoretical Framework ....................................................................................................... 4
CHAPTER 2: LITERATURE REVIEW ................................................................................... 6
  Personal Experience in PHE .............................................................................................. 6
    Cumulative Life Experiences .......................................................................................... 7
    Professional Socialization .............................................................................................. 8
    Organizational Socialization .......................................................................................... 9
  Teaching Practices ............................................................................................................ 12
    Overall Curriculum Design ........................................................................................... 13
    Topics Selected by Teachers ........................................................................................ 14
    Teaching Styles .............................................................................................................. 16
  Assessment Practices ....................................................................................................... 18
    Teachers’ Interpersonal Style and Use of Feedback ......................................................... 19
    Assessment Methods ..................................................................................................... 21
    Students’ Self-Perceptions of Sport Ability .................................................................... 23
    Motivation ....................................................................................................................... 25
Amotivation in PHE ................................................................. 25
Intrinsic and Extrinsic Motivation in PHE .............................. 30
Summary .................................................................................. 31

CHAPTER 3: METHODOLOGY ................................................. 34
Data Collection ........................................................................ 34
Participant Recruitment ............................................................ 34
Participants .............................................................................. 35
Procedures ............................................................................... 37
Data Analysis .......................................................................... 39
Trustworthiness ...................................................................... 40

CHAPTER 4: RESULTS .......................................................... 42
Darlene .................................................................................. 42
Experience Profile ................................................................. 42
Teaching Practices ................................................................. 43
Assessment Practices .............................................................. 44
Motivation ............................................................................... 45
Christine ................................................................................ 47
Experience Profile ................................................................. 47
Teaching Practices ................................................................. 48
Assessment Practices .............................................................. 49
Motivation ............................................................................... 50
Darcelle ............................................................................................................. 51
Experience in Sport .......................................................................................... 51
Teaching Practices ............................................................................................ 53
Assessment Practices ....................................................................................... 54
Motivation ......................................................................................................... 55
Jess ..................................................................................................................... 57
Experience in Sport .......................................................................................... 57
Teaching Practices ............................................................................................ 58
Assessment Practices ....................................................................................... 58
Motivation ......................................................................................................... 60
Summary of Female Participants ...................................................................... 61
Steve .................................................................................................................. 63
Experience in Sport .......................................................................................... 63
Teaching Practices ............................................................................................ 64
Assessment Practices ....................................................................................... 65
Motivation ......................................................................................................... 66
Dave ................................................................................................................. 67
Experience in Sport .......................................................................................... 67
Teaching Practices ............................................................................................ 68
Assessment Practices ....................................................................................... 69
Motivation ......................................................................................................... 70
Final Reflections .................................................................................................................. 101
REFERENCES ..................................................................................................................... 103
APPENDIX A: GENERAL RESEARCH ETHICS BOARD (GREB) CLEARANCE
LETTER ............................................................................................................................... 108
APPENDIX B: RECRUITMENT EMAIL .............................................................................. 109
APPENDIX C: LETTER OF INFORMATION AND CONSENT FORM ......................... 110
Letter of Information ........................................................................................................ 110
Consent Form .................................................................................................................... 111
APPENDIX D: RESEARCH QUESTIONS AND INTERVIEW QUESTIONS ........... 112
CHAPTER 1: INTRODUCTION

Participation in physical activity has always been incredibly important to me, as I competed at the national level for cross country running and track and field and am regularly involved in aquatics and outdoor education programs. These experiences changed my life. I would like to see other females benefit from physical activities and sports in the way I did. One possibility for promoting participation is through Physical and Health Education (PHE) classes.

As an athlete and a PHE teacher, I am particularly interested in understanding why so many girls withdraw from PHE once it becomes elective when the added benefit of regular participation in physical activity is undeniable. Furthermore, with an interest in single-sex education models, I have focused my teaching practice and professional development opportunities on the independent school systems where gender separation is predominant. I have had the opportunity to observe the behaviour of adolescent girls in these environments, participating in both the recreational and competitive aspects of sport and physical education classes. In these settings, I have observed girls who are interested in the classes and other girls who withdraw from participation.

In the academic setting of physical education, I hope to explore further the factors that contribute to the engagement of adolescent girls in physical activity in both single-sex and co-ed education models. I want to be able to bridge the gap between research and teaching practice in this environment, to contribute to an increased level of participation for girls, and to offer them the skills and attitudes to make physical activity a part of their day-to-day lives, just as it has always been for me.
Purpose of the Study

The purpose of my study was to understand how new secondary school PHE teachers (years 0-5) approach the teaching of adolescent girls in their physical education classes. To achieve this purpose, I addressed the following four research questions through interviews with eight new PHE teachers:

1. How do these PHE teachers’ backgrounds in sport and physical education impact their teaching philosophy, particularly with respect to adolescent females?
2. What teaching practices do these PHE teachers use, particularly with respect to adolescent females?
3. What assessment practices do these PHE teachers use, particularly with respect to adolescent females?
4. What challenges do these PHE teachers experience when teaching adolescents to keep the students engaged and motivated?

Rationale

There is a significant decline in the enrollment of adolescent females participating in physical education, once the choice to participate becomes elective (e.g., Gillison, Sebire, & Standage, 2012; Lonsdale, Sabiston, Raedeke, Ha, & Sum, 2009; Tessier, Sarrazin, & Ntoumanis, 2010). This decline can have two significant impacts on girls’ lives. First, there are many well-documented physiological and psychological benefits from participating in physical activity, such as improved cardiovascular fitness and better muscular and skeletal health (physiological), and self-confidence, positive body image, and enhanced beliefs about one’s sport abilities (psychological) (Lonsdale et al., 2009;
Gibbons 2009; Gillison et al., 2012; Ntoumanis, 2005; Wang, Liu, & Biddle, 2003; Wang & Liu, 2007). Second, participation in physical activity during the adolescent years is a key determinant of long-term involvement in physical activity, with absence from participation during these developmental years often having a lasting effect on choices to engage in activities reflecting physical involvement later in life (e.g., Gibbons, 2009; Wang, Liu, & Biddle, 2003; Wang & Liu, 2007). Involvement in physical education classes is therefore important to offer the opportunity for adolescent girls to gain the knowledge and skills required of sport and physical activity to stay active on their own time, while providing them with the opportunity to proactively avoid health concerns (e.g., Gibbons 2009; Gillison et al., 2012; Lonsdale et al., 2009; Ntoumanis, 2005; Tessier et al., 2010).

A challenge experienced by PHE teachers in engaging adolescent girls is the multidimensional context in which learning takes place. Physical education places emphasis on psychomotor skills, cognitive reasoning, and social learning, where student success is easily observed and measured amongst peers (Gibbons, 2009; Gillison et al., 2012; Wang, Liu, & Biddle, 2003; Wang & Liu, 2007). To further this challenge, the adolescent female population is particularly sensitive to this multidimensional context so that physical education teachers must be able to adjust curriculum expectations, assessment practices, and class interaction to support the female students’ learning and maintain their levels of motivation (e.g., Gibbons, 2009; Tessier et al., 2010; Wang, Liu, & Biddle, 2003; Wang & Liu, 2007). Little is known, however, about how physical education teachers, and especially new physical education teachers, understand adolescent female behaviour and the extent to which and how they teach the adolescent
female population to address these students’ sensitivity within the multidimensional context of physical education.

**Theoretical Framework**

Motivation to participate in a particular behaviour is supported by Self-Determination Theory (SDT), as proposed by Ryan and Deci (2000). SDT is particularly helpful in predicting behaviour within physical education (Taylor, Ntoumanis, Standage, & Spray, 2010; Wang, Liu, & Biddle, 2003; Wang & Liu, 2007). This theory suggests that human growth tendencies and psychological needs are the basis to one’s self-motivation. SDT identifies three essential needs that are required to facilitate motivation: autonomy, competence, and relatedness. Autonomy refers to the need to self-organize one’s behaviour and to feel control between an activity and one’s integrated self. Competence reflects the need to achieve desired outcomes and to feel effective in one’s efforts to do so. Relatedness is the need to feel connected to and accepted by significant others. Competence, relatedness, and autonomy as components of physical education design should therefore facilitate the motivation of adolescent girl participants.

Yet contingent on situation and circumstance, motivation may be variable. SDT additionally suggests that individuals’ type of motivation plays a significant role in their behaviour (Ryan & Deci, 2000). Intrinsic motivation refers to the enactment of an activity for its own sake, because the activity is interesting and enjoyable. Extrinsic motivation is the engagement in an activity for reasons separate from the activity itself. Amotivation is when individuals perceive no worthwhile reason for partaking in an activity and contribute to the activity passively. SDT suggests that participating for
reasons of intrinsic value is most positively associated with optimal human behaviour, compared to the other types of motivation. Within the physical education environment, fostering environments that promote intrinsic motivation may well result in increased levels of engagement and participation seen by adolescent girls.

Finally, a sub-theory of SDT that is known as cognitive evaluation theory (CET) focuses on specifying the factors that explain the variability of intrinsic motivation, framed by the social and environmental factors that facilitate it (Ryan & Deci, 2000). Social context, feedback, communication, rewards, contextual support, feelings of choice, acknowledgement of feelings, and opportunity for self-direction collectively tend to foster feelings that increase intrinsic motivation, which supports the basic needs of human behaviour. Monitoring and addressing the social and environmental factors that exist within the Physical and Health Education classroom could potentially increase the intrinsic motivation for physical activity by adolescent girls.

SDT offers a framework for the design of a Physical and Health Education class that would incorporate autonomy, competence, and relatedness components as a means to maximize student involvement. Additionally, it frames the importance of fostering environments conducive to promoting intrinsic motivation to increase levels of motivation seen by adolescent girls. Finally, CET offers a lens for monitoring the social and environmental factors within the Physical and Health Education classroom that tend to contribute to intrinsic motivation. Capturing SDT within Physical and Health Education class design may well provide optimal opportunity to achieve increased levels of motivation and interest by adolescent girls in physical activity.
CHAPTER 2: LITERATURE REVIEW

Current research examines how PHE teachers approach adolescent girls’ rate of participation and level of motivation in PHE through their (i) personal experience in PHE, (ii) teaching practices, (iii) assessment practices, and (iv) understanding of motivational behaviours. According to this research, PHE teachers can have a significant impact on girls’ rate of physical activity and levels of motivation in the multidimensional context of PHE. Therefore, there is an opportunity for PHE teachers to proactively address the rate by which adolescent girls are withdrawing from PHE and increase their rate of physical activity and levels of motivation, if specific approaches are put into place.

Personal Experience in PHE

Current research highlights the ways in which PHE teachers are strongly influenced by their personal experiences in PHE and sport including: (i) socialization through cumulative life experiences (prior to initial teaching experiences), (ii) professional socialization (pre-service teacher education), and (iii) organizational socialization (teaching contexts within a school). These experiences have a significant influence on PHE teachers’ perceptions and actions, which, in turn, shape the teaching and learning that occurs in their classrooms (Capel, Hayes, Katene, & Velija, 2011; Chróinin & Coulter, 2012; Hand, 2013; Randall & Maeda, 2010). The social aspects of learning appear to be strong in PHE, with the strength of socialization in teaching PHE apparent (Capel et al., 2011; Chróinin & Coulter, 2012; Hand, 2013).
Cumulative Life Experiences

Cumulative life experiences in PHE and sport can include personal success in education through sport, a development of love and value for sport, or interactions with positive teachers or coaches who hold strong influences (Capel et al., 2011). Positive knowledge, ideas, and attitudes perceived by students in these PHE contexts lead to identification and attachment to sport, and often the decision to become a teacher. A PHE teacher’s views and beliefs about the nature and culture of PHE are often based on these first experiences (Capel et al., 2011; Randall & Maeda, 2010).

Capel et al. (2011) explored the ways cumulative life experiences, professional socialization, and organizational socialization were interconnected and how they influenced PHE teachers’ knowledge of teaching and their development as teachers. Six PHE teacher candidates completed a journal on a monthly basis throughout the course of a one-year teacher training program. Then, at the end of the one-year teacher training program, teacher candidates and mentors were interviewed. Pre-service teachers recognized the influence their own PHE background had on content and pedagogical knowledge in the classroom, the areas of knowledge they lacked, and their perceptions of PHE. While professional socialization helped PHE teachers to make connections between undergraduate university course work and application of that knowledge to the educational environment, overall, candidates felt professional socialization was not comprehensive or influential on their teacher practices. Organizational socialization was most important in terms of developing curriculum and pedagogy comprehension. Mentors played an influential role in shaping this socialization, in both a positive and negative capacity, depending on the professional and personal relationship that existed.
Mentors and pre-service teachers made the assumption that having a good background in PHE activity meant that teachers would possess high teaching efficacy. There was an observation in the study that new teachers lacked motivation to further develop content, based on the assumption that they already possessed high teaching efficacy from their cumulative life experiences.

In a similar fashion, Randall and Maeda (2010) examined how pre-service PHE teachers’ cumulative life experiences as elementary school students in PHE shaped their current teaching and assessment practices. Five themes were considered the most influential on teaching practice: background experience, memories of enjoyment, past experiences, current beliefs about the purposes of PHE, and influence of past experiences on current beliefs (both positive and negative perceptions). Cumulative life experiences in PHE influenced teachers’ perceptions of PHE, as they desired to replicate positive experiences and modify or change negative ones in their future classrooms (Randall & Maeda, 2010).

**Professional Socialization**

Professional socialization occurs during professional teacher education training, and aims to impact educational philosophies about teaching. In the PHE context, teachers often arrive with a distinct and traceable influence on their decision-making processes, teaching practices, and philosophies as a teacher (Capel et al., 2011; Chróinín & Coulter, 2012; Hand, 2013). Despite opportunities for growth and guidance, many pre-service teachers continue to make decisions influenced by experiences to which they have been exposed in advance of teaching practice (Capel et al., 2011; Chróinín & Coulter, 2012; Hand, 2013).
A further examination of professional socialization was a longitudinal, qualitative, cohort study by Chróinín and Coulter (2012) exploring pre-service teachers’ understanding of the nature and purpose of physical education over the time of completion of their pre-service teaching program. In all, 331 participants, aged 17-39, with 83% being female, kept journals throughout the pre-service year to answer the single question “What is PE?” Data analysis involved word frequency queries and coding. Many teachers were influenced by their cumulative life experiences in PHE, despite the experiences ranging from being very positive to very negative. They highlighted their opportunities to learn social skills and make connections between PHE learnings and real-life experiences. Original perceptions of PHE were identified as being sport- and health-related (exercising and getting fit) and shifted to those of social skill development, leadership, and physical skill learning (social learning through team games) during the year. Play was also highlighted as a key message. The study emphasized the value of professional socialization for new teachers in shaping new understandings of PHE to deliver clear and consistent messages to students within their classrooms.

Organizational Socialization

Organizational socialization through work experience aims to help learners develop through practice experiences. Learners are strongly influenced by interactions with mentors, training tactics implemented for new teachers, and models of social constructs within school contexts, specifically within the PHE department (Capel et al., 2011; Chróinín & Coulter, 2012; Hand, 2013). Teachers acquire their knowledge formally or deliberately (by being taught or working with a mentor) or informally and
casually (interacting with PE teachers or playing on various sports teams) in this environment (Capel et al., 2011; Chrónín & Coulter, 2012; Hand, 2013).

The mixed-method study by Hand (2013) investigated organizational socialization, and the ways in which individual factors and contextual factors influenced early career teaching efficacy in PHE and organizational socialization. Fifteen participants (eight males and seven females) were selected, who held one to three years of teaching experience in Grades K-12. Individual and contextual factors were shown as contributing to teachers’ perceptions of efficacy. High efficacy was defined as a teacher’s level of confidence in his or her ability to be successful in teaching tasks (such as classroom management and instructional techniques). Previous mastery experiences, modelling, and encouragement of positive feedback of students influenced the development of an individual’s teaching efficacy. Teachers who perceived themselves to be of low teaching efficacy held pessimistic views of student motivation, emphasized control of the classroom through strict regulation, and became stressed by students’ misbehaviour, resorting to punishment to change behaviour. Contextual factors that negatively impacted teacher efficacy included lack of facilities and equipment during the start of their teaching experience, and lack of prestige and respect for PHE teachers. Positive contextual factors that increased efficacy included teaching with someone from the same PHE program, new gym and equipment available for teaching, support from the principal, and perceived control over content and teaching methods, with positive mentor support.

Organizational socialization tactics occurred in three distinct ways and impacted self-perception of teaching efficacy by new teachers. Learn as you go reflected teaching
practice that was developed by new teachers independently, over time, without much
guidance. While many teachers arrived from college with confidence, this method
developed self-doubt and lack of teaching efficacy. Teachers were shocked by the reality
of teaching a high volume of students, without proper equipment, while also dealing with
discipline problems. Preferred feedback was the receipt of positive and negative verbal
feedback from mentors and principals. It took the form of encouragement,
discouragement, criticism, and praise and impacted efficacy both positively and
negatively, depending on its nature. Watching mentor teaching was not always valued, as
new teachers felt some mentor teachers lacked teaching efficacy. This research identifies
the importance of ensuring that PHE teachers maintain a high self-perception of teaching
efficacy; otherwise, students may be greatly impacted. It also suggests that organizational
socialization tactics can have both positive and negative impacts on teaching efficacy.

Additionally, the study by Tsangaridou and O’Sullivan (2003) described the
relationship between PHE teachers’ educational theories and theories in use, as the
beliefs teachers hold are developed by cumulative life experiences, professional
experiences, and organizational experiences, and shape decision-making and influence
planning decisions in their classrooms. Eight subjects participated in the study, each
having 10 years of professional experience. Following all observation and interview
sessions, a final interview was conducted with the participants to highlight the
overarching views they attempted to capture. Data were analyzed using individual-case
and cross-case analysis; three major categories were identified: curricular theories,
pedagogical theories, and social theories. Although the personal biographies of teachers
were different and they worked in different settings, their practices were informed by
their overall positive experience in PHE including their cumulative life experiences, professional development, and organizational experiences. Those experiences were used to shape their professional teaching practices and their curricular, pedagogical, and social theories.

The research presented by Capel et al. (2012), Chróinín and Coulter (2012), Hand (2013), Randall and Maeda (2010), and Tsangaridou and O’Sullivan (2003) reinforces that cumulative life experiences significantly impact the teaching philosophies and preferences of new PHE teachers, and can be the driving force behind their choice to become PHE teachers. While all PHE teachers experience professional socialization, it tends to offer little impact on teaching and assessment practices. However, it could be possible to shape or modify beliefs of the new PHE teachers if they were convinced that professional socialization would impact their teaching and assessment practices. This change could be achieved by making the professional socialization process more meaningful, and, with respect to new PHE teachers, could include population-specific content, such as how to teach adolescent girls PHE. The role of mentorship practices within organizational socialization may be influential in either a positive or negative way on teaching practices of new PHE teachers.

**Teaching Practices**

Adolescent female behaviour in PHE including their level of motivation and rate of participation is influenced by teaching practices including the overarching curriculum of a course (Gibbons, 2009; Lonsdale, Sabiston, Raedeke, Ha, & Sum, 2009), unit design and topics selected by teachers (Gao, Hannon, Newton, & Huang, 2011; Gibbons, 2009;
Hannon & Ratliffe, 2006; Wilkinson & Bretzing, 2011), and teaching styles utilized by PHE teachers (Gibbons, 2009; Gillison, Sebire, & Standage, 2012; Morgan, Kingston, & Sproule, 2005; Webster, Villora, & Harvey, 2012).

**Overall Curriculum Design**

Gibbons (2009; Gibbons & Humbert, 2008) has been a key investigator in the development and implementation of PHE curriculum for girls in PHE. In a study by Gibbons (2009), the design of 32 senior physical education courses for girls was investigated. Through an analysis of course outlines, interviews with teachers, and student questionnaires, several factors that influenced girls’ enrollment in physical education were identified. Physical activity content was considered the major driving force for the underlying success of a PHE program (defined by high levels of enrollment and decreased dropout rates). Girls indicated their preference in wanting choice in activities and involvement in course design. They stressed their desire to develop skills and to be a part of a positive learning environment. Finally, they emphasized that enjoyment, meaningful assessments of skills and knowledge, and sex should be considered as fundamental aspects of course design. These findings have acted as a framework for action in the development of girl-specific physical education curriculum that seeks to address the needs of the adolescent female population to potentially increase these students’ levels of motivation. This study indicates the need for certain types of curriculum content and programming for girls. However, it is unclear the extent to which this study’s conclusions have been disseminated to PHE teachers, particularly novice PHE teachers.
Similarly, in another study by Gibbons and Humbert (2008), the perspectives of middle school girls in PHE were examined. These participants possessed similar wants and needs to those expressed by girls in senior school PHE classes. As such, revised PHE curriculum for middle school, in addition to secondary school, PHE could likely influence rates of participation and level of motivation for girls.

Curriculum comprehension and implementation are incredibly important for PHE teachers to consider, especially when designing programming for adolescent girls (Gibbons, 2009; Gibbons & Humbert, 2008). Lack of consideration for key factors identified as positive influences for motivation and increased rate of participation in PHE has been shown to negatively impact girls in PHE.

**Topics Selected by Teachers**

The selection of specific sport and fitness units in PHE strongly influences levels of motivation and rate of participation in PHE for girls (Gao et al., 2011; Hannon & Ratliffe, 2006; Wilkinson & Bretzing 2011). Gao et al. (2011) explored the ways in which selection of particular curricular activities impacted students’ level of motivation and levels of physical activity. Two hundred eighty students (156 boys, 124 girls) in Grades 7-9 participated in cardiovascular fitness, ultimate football, and dance video game in PHE, and provided usable data for analysis. Artigraphy GTIM accelerometer technology was used to measure students’ level of physical activity; students additionally completed a situational motivational scale at the end of each class. Students presented significantly higher percentages of moderate to vigorous levels of physical activity in fitness and football classes than in dance video game classes. Students reported higher motivational levels towards fitness than the other two activities. Boys demonstrated
higher levels of motivation in all activities than girls, while girls were less self-determined in the units explored. As such, curricular activities, such as team-based invasion games (students divided into teams invade opposing team’s space to score points, e.g., basketball, football, rugby, soccer), may promote higher levels of physical activity, while fitness activities may increase motivation. The study’s exploratory nature of integrating high tech (dance video game and Artigraphy GTIM accelerometer technology) is innovative and offers strategies to battling inactivity of youth, despite data suggesting that students were not as active when involved in the dance video game. The study was limited in that it did not examine students’ ability levels in each curricular activity before participating nor the impact the method of instruction of the curricular classes had on students, as classes were taught in a team-focused environment. Future research might consider the investigation of instruction of each curricular activity in a normal class environment with one teacher.

Wilkinson and Bretzing (2011) support the notion that curricular unit selection can impact rates of participation and levels of motivation in PHE. The study examined the perceptions of girls only. Participants preferred fitness units in comparison to sport units and participated most in non-typical PHE sport classes, such as Pilates, kickboxing, and core training. Girls felt that fitness activities offered a variety of choice, that they possessed the skill level to participate effectively in the activities, that the fitness class environment was non-threatening and not competitive, and that they were able to see a connection between their involvement in fitness classes and what such an activity could look like in an environment outside of PHE class.
Additionally, the study by Hannon and Ratcliffe (2006) identified that specific sport units can impact girls’ level of motivation and rate of participation in PHE. The study explored girls’ participation in flag football. In this sport unit, most girls lacked appropriate skills and knowledge of the game, were generally disinterested in participating in the game, and used male gender stereotypes to define the game. The study offered recommendations for increasing girls’ interest in flag football: the use of skill acquisition and development through practice times, the use of peer and cooperative learning activities, non-competitive game play, and modified rules or increased emphasis on running game time strategy.

The studies by Gao et al. (2011), Wilkinson and Bretzing (2011), and Hannon and Ratcliffe (2006) demonstrate the importance of PHE teachers selecting appropriate units that increase girls’ rates of relatedness and feelings of competence to increase motivation and rate of participation in PHE. Future studies should include a wider variety of PHE units to make the results more generalizable.

Teaching Styles

Teaching styles of PHE teachers have a significant influence on the motivational climate of a PHE class. Morgan et al. (2005) examined the effects of teaching styles and teaching behaviours on motivational climate and students’ cognitive responses in PHE. Four PHE teachers and 92 students were filmed during three PHE lessons for each teacher. Teaching behaviours were analyzed by a computer-coding system that measured mastery teaching practices. Mastery teaching practices are defined by a motivational climate where teachers emphasize self-referenced improvement and effort (pupil-centered reciprocal/guided discovery), while success is defined as improving one’s personal best
achievements. In contrast, a direct teacher-centered command/practice style can result in less mastery and more performance-focused teaching. One week following the study, eight pupils from each class were randomly selected and asked to participate in focus group conversations where the observations of PHE teaching styles were discussed. Teacher behaviours influenced the motivational climate of the classroom. Pupil-centered reciprocal (student-facilitated) and guided discovery (independent learning with use of instructions) styles of teaching resulted in significantly more mastery and less performance-based behaviours. In these conditions, students presented a greater response to learning, greater levels of enjoyment, and less boredom. If PHE is aimed to have students take greater responsibility for their learning to develop lifelong PHE skills, then they should be more involved in decision-making of PHE classes; use of a mastery teaching style should improve the behaviours of students in PHE. The study shows the importance of the use of deliberate teaching styles in a PHE class.

Webster et al. (2012) examined the relationship between PHE teachers’ explanations of content relevance to students during instructional settings and students’ engagement in PHE. Teachers utilized content relevance, but rate of use varied based on years of teaching experience. Experienced teachers (> 5 years, > 10 years) reported a higher frequency than inexperienced teachers (< 5 years). Teachers presented content relevance through the use of experts in the field talking about their experiences, exercises or explanations to demonstrate the importance of PHE content, discussions to help students understand the personal relevance of a topic in PHE, connections between course content from one area of PHE and other areas of PHE, requests for students to apply PHE content outside of school, telling of personal experiences to introduce and
demonstrate a topic in PHE, and use of students’ outside-of-class experience to
demonstrate or introduce a topic in PHE. This study underscores the need for novice
teachers to gain an understanding of how to teach the different individual populations
within their classes by highlighting content relevance to meet students’ needs and keep
them interested in PHE. Similarly, Gillison et al. (2012) identified that, when students
understood the health benefits of participating in PHE, they presented increased levels of
participation in PHE. The study demonstrates the importance of making objectives clear
to students and monitoring their comprehension to ensure they are feeling related to PHE
course content. Collectively, these three studies identify that deliberate use of teaching
styles by PHE teachers can influence feelings of relatedness by adolescent girls, which
contribute to increased levels of motivation.

**Assessment Practices**

Adolescents’ levels of motivation are influenced by: (i) teachers’ interpersonal
style and use of feedback (Fraser-Thomas & Beaudoin, 2002; Gao et al., 2011; Nicaise,
Cogérino, Fairclough, Bois, & Davis, 2007; Ntoumanis, 2005; Standage, Duda, &
Ntoumanis, 2006; Tessier, Sarrazin, & Ntoumanis, 2010), (ii) the use of specific
assessment methods (Fraser-Thomas & Beaudoin, 2002; Taylor, Ntoumanis, Standage, &
Spray, 2009, 2010), and (iii) students’ self-perceptions of sport ability, as further
interpreted by their teachers and peers (Nicaise, Cogérino, Fairclough, Bois, & Davis,
2007; Ntoumanis 2005; Standage, Duda, & Ntoumanis, 2006; Wang, Liu, & Biddle 2003;
Wang & Liu, 2007).
Teachers’ Interpersonal Style and Use of Feedback

Interpersonal style and delivery of feedback structured within the PHE environment and facilitated by PHE teachers can influence students’ level of motivation and rate of physical activity within a PHE class (Gao et al., 2011; Nicaise, Cogérino, Fairclough, Bois, & Davis, 2007; Standage, Duda, & Ntoumanis, 2006; Tessier et al., 2010).

Nicaise et al. (2007) examined the frequency and nature of teacher feedback patterns for both boys and girls in PHE. Seventy students were examined during 18 PHE classes instructed by two PHE teachers and behaviours of students observed (one male and one female; nine classes each). Classroom interactions varied significantly based on type of physical activity (badminton or circuit training) and gender composition of the class. Teachers initiated feedback equally with male and female students. However, the nature of the feedback varied. Regardless of skill level, girls received more praise combined with technical instruction than did boys, whereas boys received more criticism, organizational feedback, and misbehaviour feedback. Frequency of teacher feedback increased according to activity instructed. Circuit weight training directed more feedback to boys including praise, technical information, encouragement, criticism, organizational feedback, and misbehaviour feedback, whereas badminton directed more feedback to girls in the form of technical information and encouragement. When examining the relationship between teacher gender and feedback offered, the male PHE teacher directed misbehaviour feedback to both boys and girls equally, while the female PHE teacher gave more misbehaviour feedback to boys. Limitations of the study include the small sample size of PHE teachers used to ascertain how much gender implications were valid.
Additionally, student perceptions of teacher feedback were not measured, and thus it was not confirmed how the feedback was interpreted.

In support of the findings by Nicaise et al. (2007), a qualitative study by Tessier et al. (2010) investigated the impact that PHE teachers’ interpersonal styles had on their students’ achievement in PHE. Teachers who placed an emphasis on developing interpersonal relationships when interacting with students via feedback and social conversations with students saw an increase in student motivation. Teachers who were more sympathetic and supportive of their students’ performance in sport saw a more stable trend of participation by students in the class. The study highlights that teachers who are able to consciously improve their teaching styles in the areas of interpersonal relationships and delivery of feedback could increase their students’ levels of motivation and achievement of need satisfaction. Similarly, in a study by Standage et al. (2006), the relationship between PHE teachers’ interactions with students and their associated perceptions of participation in PHE was examined. Student-reported higher levels of motivation predicted teacher ratings of effort and persistence in PE. Teachers’ assessment of students’ level of effort and persistence may be noticed by students and impact self-determined behaviours.

Further, the study by Gao et al. (2011) showed that types of feedback offered to students during PHE may explain lack of motivation and levels of physical activity. Instant negative feedback had a detrimental impact on levels of motivation and participation in class, while positive or constructive feedback increased levels of motivation and participation in class. This finding reinforces the importance of offering positive feedback to students in PHE. These studies point together toward the
significance of teachers using deliberate feedback methods and purposefully constructing social interactions with students, as this feedback and these social interactions have the potential to impact levels of motivation in PHE classes and level of physical activity (Gao et al., 2011; Nicaise et al., 2007; Standage et al., 2006; Tessier et al., 2010).

**Assessment Methods**

Assessment methods in PHE are different than standard academic classrooms, as the teaching environment of PHE is more multi-faceted. Assessment methods employed by PHE teachers can impact students’ levels of motivation and participation in PHE (Fraser-Thomas & Beaudoin, 2002; Taylor et al., 2009).

Taylor et al. (2009) examined how PHE assessment practices influenced motivation levels of students. Thirteen male PHE teachers and nine female PHE teachers were interviewed. Assessment practices that were utilized by teachers were impacted by several factors. First, despite PHE being a diverse teaching environment, many school cultures placed an emphasis on the achievement of grades. PHE teachers often felt pressured to ensure students were being assessed to support their graduation certificates. Students appeared more highly motivated when they knew grade achievement was present. Next, teachers felt pressure to conform to other teachers’ assessment practices, which were not always best practices. Older teachers were less interested in trying new assessment practices. Additionally, time constraints placed on PHE class time (fewer classes of shorter duration) impacted student performance on assessments; teachers were not always able to offer adequate practice time for students to demonstrate competence in a skill, yet were still expected to assess performance. Finally, students’ level of motivation was related to teachers’ perceptions of effort and participation in the class, in
both positive and negative ways. The study pinpointed the reasons why some teachers might not utilize best practices, despite awareness of the social-contextual environment and of the influence certain assessment practices could have on students’ motivation in PHE. This study extends current research in the field as it focuses solely on assessment practices. However, the sample of the study was recruited from similar school cultures, specifically, co-ed public schools. Research should be extended to consider a variety of teaching contexts, such as single-sex or private schools, to validate results.

A qualitative case study by Fraser-Thomas and Beaudoin (2002) examined two teachers’ experiences implementing a new junior high school PHE curriculum and assessment guidelines over a one-year period. Lack of time available to teach classroom material and facilitate skill development, lack of facilities and equipment available to teach the curriculum topics, and lack of professional development and teacher training to understand new grading and assessment guidelines as mandated by the curriculum constrained the teachers’ ability to offer effective instruction. These constraining factors challenged teachers’ successful implementation of new PHE curriculum and, despite the teachers’ best efforts, students did not meet all curriculum objectives and motivation levels of students were not altered. The study demonstrates the difficulties associated with implementing new PHE curriculum, in terms of adequately teaching skills to students, to achieve meaningful assessments and influence students’ motivation and lifelong involvement in PHE.

These two studies identify challenges of assessment methods used by PHE teachers and show the importance of PHE teachers having in-depth understanding of
appropriate assessment methods to adequately reflect the curriculum expectations, while also maintaining motivation levels of students.

**Students’ Self-Perceptions of Sport Ability**

Within the physical education context, perceptions of other students are quickly formulated and recognized by peers, which can contribute to negative self-perceptions and poor performance during assessments in PHE (Ntoumanis, 2005; Wang, Liu, & Biddle, 2003; Wang & Liu, 2007). Sport ability beliefs are the perceptions of one’s ability to participate and achieve success in a physical activity and can exist as incremental beliefs, in which abilities are thought to be an acquired skill that can be increased and improved through practice and effort, or entity beliefs, in which ability is thought to be fixed and unchanging, with a pre-existing belief among adolescent females as to whether or not they are ‘sporty’ (Wang & Liu, 2007). Self-perception is impacted by one’s perception of competence, body attractiveness, perceived strength, and physical condition in relation to others and to one’s self (Wang, Liu, & Biddle, 2003).

A cross-sectional study by Wang and Liu (2007) surveyed a sample of 343 female secondary school students to investigate the relationship among sport ability beliefs and achievement goals (task orientation and related competence), self-determination, and girls’ enjoyment in physical education. A positive correlation was found between levels of motivation (intrinsic motivation) and levels of competence (sport ability beliefs, relative autonomy, physical self-perception). Specifically, subjects who indicated high levels of perceived competence were reported to have high levels of enjoyment in physical education. This finding supports previous research that indicates perceived competence is a strong predictor of enjoyment in physical education and demonstrates the
importance of self-determination and perceived competence in physical education as predictors of motivation and performance during assessments in PHE. This study did not identify the population’s perceptions of environment or situational goal orientations, which can influence sport ability beliefs and achievement goals interpretation. However, this study supports the need for investigation of environment in relation to student behaviour in the physical education classroom.

In a like manner, Wang, Liu, and Biddle (2003) examined how self-perception variables impacted motivation and levels of physical activity in PHE. High levels of motivation were associated with incremental beliefs and high self-esteem, while entity beliefs and low self-esteem were related to low levels of motivation. Fostering incremental views of sport ability beliefs in students may therefore result in higher self-esteem and increased future intentions to participate in physical education with subsequent impacts on performance during assessments in PHE.

Ntoumanis (2005) explored the relationship between student experiences in PHE and their future intentions to participate in physical education and performance on assessments in PHE. Students who participated in elective physical education reported more positive motivational experiences than those who dropped out of physical education, with girls dropping out of physical education at a higher rate than boys. When PHE teachers addressed the identified psychological needs of students in physical education, the students tended to have greater motivation and to enroll in future physical education classes. An understanding by teachers of need satisfaction of adolescents may therefore be imperative for enhancing student experiences and participation rates during assessments in PHE.
These studies stress the importance of PHE teachers’ comprehension of the impact self-perceptions by adolescent girls of their sport ability has on their performance on PHE assessments and their levels of motivation in PHE. As a result, teachers should be careful that their assessment methods do not produce increased negative self-perceptions among girls.

Motivation

As PHE is mandatory for adolescent girls until Grade 10 in Ontario, PHE becomes an environment where a sense of alienation and hopelessness can be observed in students, who, despite these feelings, are obliged to participate (Ntoumanis, Pensgaard, Martin, & Pipe, 2004; O’Donovan & Kirk, 2008; Olafson, 2002; Whitehead & Biddle, 2008). When students present lack of interest in PHE, or amotivation, a range of withdrawal behaviours can be observed (Ntoumanis et al., 2004; O’Donovan & Kirk, 2008; Olafson, 2002; Ryan & Deci, 2010; Whitehead & Biddle, 2008). On the other hand, when students possess intrinsic motivation, they present the greatest level of participation in PHE (Kilpatrick, Hebert, & Bartholomew, 2007; Ryan & Deci, 2010; Taylor et al., 2010).

Amotivation in PHE

Amotivation is the absence of both intrinsic and extrinsic motivation and represents a complete lack of self-determination. A person who exhibits amotivation perceives no worthwhile reasons for pursuing an activity (Deci & Ryan, 2000). A student who is amotivated in PHE may exhibit boredom, low attendance, or passive attendance during lessons (Deci & Ryan, 2000).
Ntoumanis et al. (2004) examined the ways in which amotivation behaviours of students are expressed in PHE. A participant pool of 390 students taking PHE was asked to complete questionnaires that measured their level of motivation in PHE. Using confirmatory factor analysis, 21 students (15 girls and 6 boys) were identified as being amotivated in PHE. These 21 students were asked to participate in semi-structured interviews. Data analysis through coding of meaningful themes identified three perceived causes of amotivation.

First, learned helplessness was seen as a major influence on amotivation, which was defined by the students’ lack of understanding of the role of PHE to their health, limited time to achieve the purpose, and their lack of interest in units. Additionally, learned helplessness included the self-perception of lack of athletic qualities to achieve good performances in PHE.

Second, personal concerns were mentioned as reasons for not participating, including feelings of estrangement from peers, participation in high competition game play that showcased their perceived lack of athletic qualities, and body image issues highlighted by the clothing, changing clothes, and showering associated with PHE.

Finally, contextual factors were identified as contributing to amotivation: the identification of poor teaching styles including inappropriate teaching attitudes and behaviours, and poor teaching climate including the prevalence of the ability of strong performing students. The perceived causes of amotivation contributed to specific exhibited behaviours that could be attributed to levels of amotivation, including avoidance behaviour, where students reported poor levels of attendance in class, low involvement including disruptive behaviour (chatting by girls and messing around by
boys), passive engagement during participation, and expression of low future intentions to participate in PHE or physical activity outside of class.

The study identifies the opportunity to further study amotivation based on cultural and health-related factors that may influence students’ perceptions of amotivation that cannot be changed. Further studies should explore levels of amotivation in different educational climates, such as private versus public school, and with different ages of children (middle school versus high school) with a larger study population. Additionally, the influence of parental input on amotivation in PHE might be considered as a contributing factor.

Whitehead and Biddle (2008) supported the identification of withdrawal behaviours seen by girls in PHE as a result of amotivation. The researchers examined girls’ perceptions of motivating factors that influenced their behaviours in PHE. Forty-seven girls aged 14 to 16 participated in exploratory focus groups. Seven main reasons were identified as influencing girls’ behaviour in PHE. The perception of femininity impacted rate of participation in physical activity in that girls would withdraw from participating if they appeared less feminine, or if being active would ruin their appearance and cause them to get sweaty. Many girls did not want to have messy hair and ruined makeup and to look untidy and were uncomfortable with their bodies being compared to others. Appearance-related withdrawal behaviours included the use of excuses and reasons to not participate or the deliberate forgetfulness of their uniforms. Perceived lack of physical ability influenced effort during participation. Girls would rather spend time with their friends, instead of playing sports, or just simply do other activities. Lack of motivation was connected to the lack of appreciation of benefits,
including health-related components and feelings that sports were right for them or not right for them. Girls preferred activities that were more fun and less structured. In summary, social and psychosocial factors influenced the PHE environment and ultimately the girls’ behaviours in PHE.

Olafson (2002) identified similar amotivated behaviours and avoidance strategies used by middle school students as a result of key factors contributing to levels of amotivation. Seven girls were asked to participate in the study based on recommendations by two PHE teachers. In total, 46 interviews were collected for these students over two years. Amotivated behaviours were a result of the reaction to curriculum including a dislike for topics covered, even though many girls enjoyed being physically active; intolerable peer relations in terms of popular students being associated with strong performances in PHE; the want or perceived need to impress boys by looking cute in class; and dominant cultural messages about femininity including the requirement to possess a specific body type. Behaviours of amotivation in PHE included skipping class, having parents write a note to be excused from class, disappearing to the change room after attendance had been taken, refusing to change into PHE clothes, and non-participation in activities.

The study by Vu, Murrie, Gonzalez, and Jobe (2006) also contributes evidence to amotivation seen in girls in PHE. The study examined the perspectives of adolescent girls and boys on girls’ physical activity behaviours. Both boys and girls had similar perceptions of girls’ behaviours in PHE. Girls who were very athletic were viewed as tomboys or being too aggressive. Adolescent girls held more favourable views of athletic girls in PHE, identifying them as cool or good, whereas many boys were uncomfortable
with the high levels of athleticism observed from certain girls. Girls thought that taunting, name calling, and teasing from boys impacted their desire to participate in PHE, while boys felt that girls restricted their own PHE behaviours with their fear of getting dirty or sweaty, fear of breaking a nail or being embarrassed, or shyness about participation. Parents’ protectiveness of girls influenced their participation as the parents feared the girls would get hurt. Increased rates of participation by girls in physical activity were closely identified to parental views that encouraged involvement in PHE. Lack of motivation, being shy, and levels of low self-esteem were the primary reasons identified by girls for not wanting to participate in PHE and their decision to engage in withdrawal behaviours. The study identified withdrawal behaviours in girls and found that these behaviours were strongly influenced by their environment, including parents, teachers, peers, school, or community.

Finally, the study by O’Donovan and Kirk (2008) offered greater understanding of the factors that influence girls’ engagement in PHE. Thirteen adolescent girls participated in semi-structured interviews. Girls disliked participating in PHE if they felt they were not good at the activity; girls avoided participating so that they did not display lack of ability and “look like a fool.” Girls were strongly influenced by the perception of being sporty, a perception that resulted in withdrawal behaviours. Physical appearance made them look cool or not cool. Girls would avoid changing and looking sweaty and would instead dress up for PHE, wearing earrings and makeup to highlight their ‘girly’ identity. Group definitions of ‘jocky,’ ‘girly,’ ‘nerdy,’ ‘geeks,’ and ‘loners,’ were clearly seen by girls in the class. Developing a friendship within the wrong group or paired with the wrong partner could impact levels of participation and effort.
Intrinsic and Extrinsic Motivation in PHE

Intrinsic motivation is defined as the highest motivation and involves pursuing an activity for its own sake because it is interesting and enjoyable (Ryan & Deci, 2010). Extrinsic motivation is the pursuit of an activity to attain an outcome separate from the activity itself (Ryan & Deci, 2010). Three hypothesized innate psychological needs (autonomy, competence, and relatedness; Deci & Ryan, 2010; Kilpatrick, Hebert, & Bartholomew, 2007; Taylor et al., 2010) connect closely to higher levels of concentration by students and levels of effort in PHE.

Kilpatrick, Hebert, and Bartholomew (2007) compared motivation for sport participation versus exercise among upper year high school students who were enrolled in PHE. Two hundred thirty-three (233) participants (132 girls, 101 boys) completed questionnaires that focused on their involvement in sport and exercise physical activity, including frequency, duration, intensity, and adherence of participation. Participants were more likely to report intrinsic motivational factors, such as enjoyment and challenge, for engaging in sport, whereas motivations for exercise were of more extrinsic motivational factors, such as weight and stress management. Thus participants’ motivation for engaging in sports differed from their motivation to engage in exercise. The highest rated factors influencing motivation for sports were competition, affiliation, enjoyment, and challenge while, for health, appearance-related factors were present. Boys, when compared with girls, tended to be more highly motivated by performance-related or ego-related factors such as challenge, strength and endurance, competition, and social recognition, regardless of activity type. Achievement of feelings of autonomy, competence, and relatedness facilitated the adoption of motivating behaviours and
activities by participants. The study identified that intrinsic and extrinsic motivation in PHE leads participants to exhibit more positive adherence and participation in sport and exercise.

Taylor et al. (2010) examined PHE students’ psychological needs and motivational regulations towards PHE in terms of presented effort, future exercise intentions, and levels of leisure time physical activity. Changes to competence and relatedness positively predicted change in effort of girls in PHE. Changes to feelings of competence positively predicted intentions to exercise. Competence positively predicted leisure time physical activity. Intrinsic motivation positively predicted changes in effort, changes in intentions to exercise, and involvement in leisure time physical activity. The study draws attention to the importance of increasing adolescent girls’ perceived competence of their abilities, their intrinsic motivation, and their participation in PHE.

**Summary**

To address the growing concern of adolescent girls withdrawing from elective physical education and increase rate of participation and levels of motivation in PHE, evidence from existing research pertaining to teaching approaches of PHE teachers needs to be disseminated to, understood by, and applied by PHE teachers in their classrooms to affect change.

Personal experience gained by PHE teachers though cumulative life experiences, professional socialization, and organizational socialization influences their teaching philosophies and approaches (Capel, Hayes, Katene, & Velija, 2011; Chróinin & Coulter, 2012; Hand, 2013; Randall & Maeda, 2010). While PHE teachers are strongly impacted
by their positive experiences in sport, they must understand that most adolescent girls in PHE do not experience the same feelings of motivation as they do. PHE teachers should be mindful of ensuring that their teaching philosophies and teaching approaches reflect the needs of the adolescent girl population instead of solely reflecting their own experiences in PHE.

Rate of participation and levels of motivation seen in adolescent girls are influenced by teaching practices including the overarching curriculum of a course, the topics selected by the teacher, and the teaching styles utilized by PHE teachers (Gao, Hannon, Newton, & Huang, 2011; Gibbons, 2009; Lonsdale, Sabiston, Raedeke, Ha, & Sum, 2009; Morgan, Kingston, & Sproule, 2005; Webster, Villora, & Harvey, 2012). In this context, consideration of autonomy and relatedness by PHE teachers is an effective strategy for addressing adolescent girls’ low levels of motivation.

PHE teachers’ assessment practices have an effect on motivation of adolescent girls through interpersonal style and use of feedback, use of assessment methods, and students’ self-perceptions of sport abilities as interpreted by their teachers and peers. Assessment practices can shape adolescent girls’ motivation (Fraser-Thomas & Beaudoin, 2002; Gao et al., 2011; Nicaise, Cogérino, Fairclough, Bois, & Davis, 2007; Ntoumanis, 2005; Standage, Duda, & Ntoumanis, 2006; Tessier, Sarrazin, & Ntoumanis, 2010). PHE teachers must be reflective and deliberate in the selection of their assessment practices and be cognizant of strategies that increase students’ feelings of competence.

Research identifies the importance of PHE teachers understanding the motivational behaviours presented by their students to address the growing concern of withdrawal from elective PHE programming (Ntoumanis, Pensgaard, Martin, & Pipe,
2004; O’Donovan & Kirk, 2008; Olafson, 2002; Whitehead & Biddle, 2008). PHE teachers should work to identify what student behaviours in PHE align with specific levels of motivation if they are to address these behaviours appropriately. Strategies that increase girls’ feeling of competence, relatedness, and autonomy tend to increase rate of participation and level of motivation.

PHE teachers need to be deliberate in the use of teaching and assessment approaches for adolescent girls and gain an understanding of the importance of autonomy, relatedness, and competence strategies in increasing levels of motivation and rate of participation in class if they are to proactively address girls’ withdrawal from elective physical education through increased engagement in PHE classes.
CHAPTER 3: METHODOLOGY

My descriptive, exploratory, qualitative study investigated the teaching and assessment practices of eight novice secondary school Physical and Health Education (PHE) teachers (five years of experience or less) with a focus on how they worked with adolescent girls. The qualitative design of my study allowed for the collection of detailed discussions, which encouraged participants to offer their own points of view (Gibbons 2009; Gillison, Sebire, & Standage, 2012; McMillan & Schumacher, 2010).

Data Collection

Participant Recruitment

Ethical clearance for my study was gained from Queen’s University, General Research Ethics Board (GREB; see Appendix A). Following ethics clearance, participant recruitment commenced.

Participants were recruited through the professional network of Physical Education Teachers across Canada via email (see Appendix B). Recruitment emails were distributed through network contacts to 40 possible participants who were believed to fit the inclusion criteria. The study sought eight participants (four male and four female) with 0-5 years of experience teaching in Intermediate-Senior physical education classes for adolescent girls (Grades 7-12). Adolescent females in Grades 7-12 are most vulnerable to withdrawal from physical education, at a rate of approximately 60%, with the steepest decline in participation occurring between the ages of 13-18, as only one credit of physical education is required for completion of their secondary school diploma.
in Ontario (e.g., Gillison et al., 2012; Wang, Liu, & Biddle, 2003; Wang & Liu, 2007). As such, teachers of these classes can be influential on adolescent girls’ drop-out decisions (e.g., Gibbons, 2009; Lonsdale, Sabiston, Raedeke, Ha, & Sum, 2009; Ntoumanis, 2005).

Of the 40 potential participants contacted for recruitment, all 40 offered responses. Fifteen expressed their interest in participating in the study; however, seven did not fit the inclusion criteria and were eliminated from selection. Coincidentally, the remaining eight participants who expressed interest in participating were an equal split of four males and four females and fit the inclusion criteria. The other 25 recruited participants indicated they were not teaching and ineligible for consideration. Overall, the recruitment of participants did not pose a challenge. The eight participants selected to participate received letters of information and signed consent forms for the study (see Appendix C). The consent forms were filed for privacy and safekeeping and will be kept securely for the next five years and then destroyed. No inclusion or acknowledgment of school board was required. The eight participants selected were Darlene, Christine, Darcelle, Jess, Steve, Pete, Finn, and Dave (names of subjects changed for privacy).

Participants

Female participants. Darlene, a teacher in year three working in supply and Long-Term Occasional (LTO) positions, was somewhat reserved and soft spoken, but incredibly interested in the topic of study as she was completing a master’s thesis on a similar topic at the time. She provided insightful comments and was easy to interview.

Christine, who has three years of teaching experience in supply and LTO positions, was talkative and outgoing. While her responses were detailed, she asked for
clarification on several questions and, during the follow-up conversation, elaborated further on her teaching philosophy, as she was unsure of what to offer during the original interview. Christine’s interview can best be described as enjoyable.

Darcelle, a teacher with four years’ experience working in LTO positions, appeared confident and self-assured in her teaching practices. She required little wait time before responding and was efficient in her responses, offering great detail and insight into her teaching practices. Darcelle’s interview was the longest one.

Jess, a teacher in year four with a permanent position, was confident in her approaches to teaching and presented herself in a laid-back manner. She was to the point, offering clear and concise responses. As a consequence, Jess required prompting to gain further detail for some of her answers.

**Male participants.** Steve, a teacher in year two working in supply and LTO positions, was concrete in his responses, yet not self-assured about his teaching practices. Steve asked for clarification often on the questions being asked and required significant prompting to gain more detail and insight for his responses. Steve maintained a casual demeanour during the interview.

Dave, a teacher with three years’ experience working as a supply teacher, was very direct in his responses but did not offer confidence in his teaching practices and seemed uncomfortable during the interview. His responses were sometimes difficult to follow as he withdrew towards the end of his statements and was almost inaudible. He took a lot of time to formulate his responses.

Finn, a first-year teacher working as a supply teacher, was eager and extremely talkative, offering lots of detail in his interview responses. His interview was most
enjoyable, as he continually became animated and enthusiastic when describing his teaching practices. It was clear that Finn is a passionate teacher.

Pete, a first-year teacher who holds a permanent position, was incredibly self-assured. He had experience conducting his own master’s thesis research. His interview was detailed and interesting, but Pete appeared stand-offish and presented himself in a formal way.

**Procedures**

Due to availability and accessibility of the participants recruited for the study (time restrictions due to teaching commitments and geographic locations across Canada), interviews were conducted via phone or Skype and were audio-recorded. The scheduling of interviews posed a challenge due to the ever-changing and busy extra-curricular coaching schedules of many of the participants. As a result, interviews were scheduled and conducted over a period of three weeks. In advance of interviewing the participants, the questions were pilot tested with two physical education teachers who fit the same inclusion criteria as study participants, to ensure that questions were clear and would elicit authentic responses. The pilot testing confirmed that questions were useful in eliciting the range of participant responses. Interview questions were adapted from the question/probe model used in the study by Gibbons (2009) titled “Meaningful Participation of Girls in Senior Physical Education Courses” and were supported by guidelines from Patton (2001) and Rubin (1995) that recommend question/probe formatting for qualitative interviews. The guidelines suggest that researchers follow closely the developed interview guide to initiate conversation. As required, participants should then be probed to clarify any responses offered, to confirm the participants’
understanding of the questions, and, when necessary, to increase the richness of the data that was being obtained. Once all formal interview questions are addressed, follow-up conversations should be conducted with participants discussing any additional topics covered in the interview. Interviews should then be transcribed and sent to the participants for validation and to confirm credibility of the data collected.

The interview questions were categorized into sections that reflected teaching experience and personal experience with physical education and sport, teaching pedagogy, challenges, successes, and recommendations for the future. Using the interview guidelines from Patton (2001) and Rubin (1995) that supported question/probe formatting for qualitative interviews, interviews commenced and followed the developed interview guide (see Appendix D) that initiated conversation and discussions with the participants. Interview length varied across participants, lasting approximately 45-60 minutes, depending on the amount of detail and reflection offered. Some participants were detailed in their responses, while others were concise and to the point. Some participants would answer questions with single statements that did not sufficiently address the interview question. When required, participants were then probed to clarify any responses offered and to increase the richness of the data that were obtained. Interviews were transcribed by a research assistant and were then sent to the participants for validation to confirm credibility of the data collected. All participants confirmed their satisfaction with representation of their responses in the transcribed interviews.
Data Analysis

I followed data analytic procedures as previously used in the field of qualitative research focused on PHE and motivation of adolescent girls. For example, Gibbons (2009), through content analysis, aimed to identify patterns and core meanings of the data in interview data collected. In Gibbons’ analysis, six themes were clearly defined and used to inform researchers of the wants and needs of adolescent girls in physical education. Additionally, similar data analysis utilized by Tessier, Sarrazin, and Ntoumanis (2010) allowed for the definition of nine themes, which summarized the observations apparent in teaching pedagogy and behaviours of adolescent girls in a classroom. Finally, Gillison et al. (2012) followed the same procedure when analyzing and interpreting interview transcripts to identify meaningful content from the interview texts and open further discussion on the topic.

In following similar data analysis practices as those presented by Gibbons (2009), Tessier, Sarrazin, and Ntoumanis (2010), and Gibbons, Humbert, and Temple (2010), data analysis began with the reading of individual transcripts for each participant to gain an in-depth understanding of what responses and perspectives had been offered. Following the reading of each transcript, using the content analysis method proven successful by Gibbons (2009), the transcripts were reread, and similarities across transcripts were highlighted as possible themes by hand. Possible themes deduced from that of Gibbons (2009), Tessier, Sarrazin, and Ntoumanis (2010), and Gibbons, Humbert, and Temple (2010) included teachers’ interpretations of curriculum guidelines, subject selection, assessment practices, class environment, and the social dynamics within PHE classes. These themes, along with the SDT framework and recommendations for
pedagogy and teaching practices, were considered when reviewing the transcripts. Upon completion of the content analysis, three successful themes were identified at that time focusing on the motivational needs of adolescent girls in physical education: experience profile in sport, teaching pedagogy and curriculum, and challenges and successes of teaching adolescent girls. As formal coding began using NVivo software, and as the writing of results commenced, it became apparent that content for each theme was repetitive so that it became difficult to concisely describe findings. In consultation with my research supervisor, we decided that the themes needed to be adjusted and that four themes should instead be coded. These four revised themes included experience profile in sport, teaching practices, assessment practices, and motivation. With confirmation of the four new themes, NVivo was used to recode transcripts. In addition to the four themes identified, the cross-cutting themes were coded for the discussion.

**Trustworthiness**

Shenton (2004) presents four criteria that are useful in measuring trustworthiness of qualitative research: credibility, transferability, dependability, and confirmability. Credibility is used to measure the internal validity of a study; researchers should aim to measure whether or not they are achieving the intended purpose of the study (Shenton, 2004). Credibility was achieved by adopting methodology from current research in the field that was well-established, including research methods, sampling procedures, and line of questioning during interviews and data analysis, to promote confidence in the credibility of data collected. Participants were made to feel welcome through casual conversation and email in advance of formal interviews, and participants were offered the
chance to review the transcripts of their interviews to ensure they were properly represented and that honest responses were gathered.

Transferability is a measure of external validity and is concerned with ensuring that findings from the study may be applied to other contexts (Shenton, 2004). To achieve transferability, detailed descriptions of the study context and data were provided so readers could gain a clear and strong understanding of the research to apply the methods and results to other contexts. Details of the study included number of participants, inclusion criteria, recruitment efforts, data collection methods, number and length of collection sessions, and time period during which data were collected. Detailed descriptions of results were also presented for comparison purposes.

Dependability is the detailed reporting process within a study that allows further research to repeat the study and gain the same results (Shenton, 2004). To achieve dependability, in-depth methodological descriptions of operational and executional strategies have been included, such as a description of planning and execution of strategy, operational details of data gathering addressing what was done in the field, and reflective appraisal of the project, evaluating the effectiveness of the process of inquiry taken to provide future researchers with the ability to replicate the study.

Confirmability is the act of ensuring that a study’s findings are the result of the experiences of participants, rather than characteristics or preferences of the researcher (Shenton, 2004). To achieve confirmability, admission of bias and beliefs and assumptions were captured in the presentation of limitations of the study, along with recognition of study shortcomings. In-depth methodological description was presented to allow future researchers the opportunity to evaluate the study as a whole.
CHAPTER 4: RESULTS

In this chapter, the results are presented by participant gender, first examining female participants, Darlene, Christine, Darcelle, and Jess, and then male participants, Steve, Dave, Finn, and Pete. For each participant, the following four themes are discussed: (i) the participants’ personal experience in sport and how it influences their teaching philosophies; (ii) their use of teaching practices with adolescent girls (and boys) in PHE; (iii) their use of assessment practices with adolescent girls (and boys) in PHE; and (iv) their comprehension of motivational behaviours of adolescent girls and boys.

Darlene

Experience Profile

As an athlete, Darlene competed in the sport of field hockey for 10 years. Transitioning into the role of a coach over the last three years, she has maintained her involvement in both a varsity field hockey program and developmental athlete program. She has found significant successes in her accomplishments as a coach, having been awarded a nationally recognized coaching award.

As a student in high school, Darlene was part of an outdoor education program that replaced the PHE curriculum at her school. She continued her studies as an undergraduate student in a general PHE program and then transitioned into a B.Ed. program where she made the choice to include outdoor education as a third teachable, in addition to her PHE and biology teachables. Darlene continued her studies as a graduate student, pursuing research in the field of girls’ participation in PHE. While reflecting on
her experience during her B.Ed. year, Darlene speaks of the importance of what she was learning [PHE] to shape her teaching practices: “When I was in high school, I didn’t have access to physical education. We did outdoor education [instead]. So when I actually arrived in teachers’ college, I needed to learn a lot about PHE at that point in time.” She also refers to the ways in which her teaching philosophy has been strongly influenced by current research in the field of PHE that she has examined in her graduate studies.

My philosophy of teaching has sort of been influenced by research out there. So looking at choice for adolescents, providing opportunities that aren’t always sports-related and providing opportunities that are separate from boys. Making them feel comfortable and confident in their own skin, marking based on participation, [and] attitude, rather than based on how well you threw the Frisbee or that sort of thing.

With two years of teaching experience, Darlene has gained an understanding of adolescent girls in PHE through one long-term occasional (LTO) position for Grade 10 PHE and an array of day-to-day, on-call work. Darlene has not had the opportunity to hold permanent work. As such, she primarily has had to follow set lesson plans by permanent teaching faculty.

Teaching Practices

As a result of the LTO and supply teaching assignments, Darlene has not had the opportunity to select units of instruction for her classes. Despite this, she has been able to incorporate her own special touch into all units. “I’ve added in a lot of modified game play, to take away the regular rules of the game and open the girls up to having a bit of fun when trying a new sport.” During a unit, Darlene includes invasive game sport and individual sport units, such as field hockey (a unit she never taught to boys), rugby, basketball, volleyball, and ballroom dancing. Additionally, she has taught a fitness week,
where students engaged in a combination of weight room, walking, and home body-weight exercises.

Darlene describes the typical pattern by which she instructs a class. At the start of each class, she identifies on the white board the learning objectives for the class and her expectations for helping the students achieve them. As the unit progresses, she develops isolated skills into game play. As an example, she speaks about a class where she taught field hockey. The learning objectives were focused on stick handling and ball movement. After basic drill progressions, and towards the end of the class, she instructed the students to participate in a game of kings’ court, where the object was to maintain control of the ball in a condensed space (versus playing a game of field hockey following regulated rules).

When comparing teaching practices for boys with girls, Darlene thinks that she would teach them in a very similar fashion but observes that energy levels and behaviours need to be managed in different ways. Girls are willing to practice and engage in skill development, where boys want to jump into game play right away.

Assessment Practices

Throughout a lesson of instruction, Darlene incorporates the use of feedback: whether she offers direct teacher-to-student feedback, asks students to complete self-assessments, or facilitates group discussions upon the completion of a unit. “Girls have been very open to learning a new skill if they are provided with feedback and the opportunity [to make changes].”

Darlene’s assessment practices have been guided by the Ontario curriculum expectations, specifically from Growing Success and the PHE curriculum for Grades 9-
12. She captures daily participation marks, with evaluation criteria being based on attitude, effort exerted, preparedness, and level of participation. Darlene also assesses daily work habit-learning skills including responsibility, organization, self-regulation, initiative, independent work, and collaboration. Additionally, as a part of the sport units, Darlene prepares a summative skill-related assessment. Overall, the curriculum dictates her summative assessment practices but is contradictory in also asking teachers to limit the number of summative assessments captured for each student. “I wouldn’t use that assessment model again. I didn’t like it. I would modify it in the future. It was too complicated a process and in the end weekly summative marks were comparable to daily summative marks.”

When comparing assessment practices for boys and girls, Darlene feels that she would assess them in a very similar fashion. “Assessment practices might be the same, but, again, I would not use the same assessment model, I would find something new.”

**Motivation**

Certain units in PHE seem to increase motivation of girls. As an example, Darlene discovered through a self-reporting survey that, in particular, the fitness, dance, field hockey, and rugby units taught were of significant interest to her female students. “I felt this reporting contradicted what I had seen in the class,” but this divergence highlights the need for constant self-assessment by girls in PHE.

When Darlene provides her students choice during class, it increases their motivation as well. “With more choice they seem more engaged in the [learning] process. It’s not just someone telling you what to do. It's actually you making the decision as a student.” Motivation of girls appears high when modified game play is used, the use of
game play strategy is increased, and level of competition is decreased. “Removing the
idea of failure and focusing on success like changing the outcome of a sport has worked
well; it has been the biggest most successful tactic [in increasing levels of motivation].”
Additionally, highlighting the learning objectives and goal setting as a group at the start
of a unit allows students to constantly self-assess, gain clarity, and remain focused on the
task, all of which tend to increase motivation. Darlene observes that girls feel motivated
when they receive positive feedback on how to make improvements to tasks but only if
they are also offered the opportunity to practice and make changes. Additionally, the girls
seem motivated and connected to her as the teacher, being young and female, as a strong
role model. “With girls, [motivation] is all about bringing up the energy and making them
run around and try new things, and getting them comfortable enough so that they’re not
scared to screw up, or embarrass themselves.”

On the other hand, Darlene observes that many girls are lacking motivation when
they have spent a lot of time on their appearance for school. “So often their excuse was
that they had curled their hair in the morning, or they had made themselves look nice and
didn’t want to have to re-do it.” Often they present themselves as being simply
disinterested in PHE based on preconceived notions or experiences in PHE. “I think that
their negativity may stem from the way they were taught PE in elementary school; they
have a certain perception of what PE is. Many teachers just say, play this sport, do this
activity, without any learning happening.” Additionally, Darlene observes that girls are
less motivated to participate when they feel intimidated by a skilled member of the class.
“There is such a wide variety of skill level with Grade 9 girls.”
When comparing genders, boys are generally excited and appear motivated to participate in PHE, but, unless Darlene introduces them to game play immediately, she loses their attention. “They are still moving and being active, but they’re also being very silly and goofy. It’s hard to bring their attention in and have them focus on building skills.” As well, boys are less motivated to participate in skill-related tasks. Often their lack of interest is seen by “the rolling of their eyes too with an ‘I know how to do this’ attitude.”

Christine

Experience Profile

As an athlete, Christine was involved in recreational volleyball throughout high school. She currently coaches a variety of sports at the recreational level as a volunteer, including volleyball and basketball. As a performer, Christine danced competitively for 10 years and is a dance instructor of adolescent girls outside the academic environment. Christine was deliberate in classifying herself as a performer versus athlete when referring to her participation in dance. As a student, Christine pursued an undergraduate degree in kinesiology, continuing into a B.Ed. program, where her teachable subjects were PHE and geography. She has since completed an advanced qualification in dance to add to her teachable subjects.

Christine was concrete in expressing her motivations for becoming a teacher, which positively relates to her experience in PHE.

I found that when I was playing sports and dancing, it made me really in tune with my body and created a health and awareness. I wanted to understand my body in terms of how it works and how to be more efficient and how to improve my
physical fitness. I think it definitely influenced my path of taking teaching with a qualification in PHE.

As a teacher, Christine makes clear connections between what she has learned through her positive experiences in PHE and, in turn, how those experiences have shaped her teaching philosophy for her students. “Physical and health education programs need to be altered in the primary and secondary levels in order to more thoroughly educate students about the importance of daily exercise, proper nutrition, and wellness of the mind and body.”

While Christine has found consistent supply work over the last three years, she has had limited opportunity to implement her teaching philosophy. However, as a supply teacher, she has become involved in volunteer choreography of dance routines for school productions that has given her insight into teaching PHE to adolescent girls.

**Teaching Practices**

Christine has taught a range of PHE activities including soccer, softball, basketball, and many games of low organization (GLO) where there is a lower sense of competition and a greater sense of cooperation among students. Additionally, with a background in dance and gymnastics, she has been able to highlight physical activity and athletics in a non-traditional sense to her classes. Also, Christine has incorporated a self-defense unit, taught by a guest instructor.

Christine describes her typical unit of instruction. Importance is placed on skill development and strategy versus competitive game play. “I think the skill has to come first before game play because, if there is no skill, then the game will be a little boring and might not be something challenging for them.” This instructional strategy gives students “the aspect of having a position and playing it, so that they understand that they
are supporting other players [during a game].” Using a football unit as an example, Christine explains the skill progression of throwing properly, to throwing accuracy with target practice, and then executing strategic plays. She includes modified game play at the end of the unit, which challenges the traditional “standing and stopping” rules of football. Game format is changed to that of a relay, where a successful throw and catch is required to score a point.

When comparing her teaching practices for boys and girls, Christine feels she is more creative when developing skills and game play activities for girls, compared to the boys, where she mostly focuses on straight-forward drills. As well, she changes her approach from being encouraging with females to competitive or “alpha” with the males.

**Assessment Practices**

Christine feels that in PHE she is constantly assessing her students but that there is flexibility in how she approaches and applies the curriculum expectations in her classes. “I would say that most of the time, a lot of [assessment] is diagnostic where you’re testing them and seeing how they’re acting and using your observation.” Although diagnostic assessment represents the major source of data, “eventually, there’s an evaluation where you have to do it either by testing a skill or testing them through a written project.” Christine describes that final assessments for the unit are delivered to her students in the form of projects, tests, presentations, or practice skill assessments.

When offering feedback, Christine feels it is important to provide immediate feedback during skill development, especially for basic safety purposes in addition to skill development. She highlights the importance of being positive when delivering direct feedback to ensure that students do not walk away from a class with a negative self-
perception of their abilities in PHE. Additionally, Christine thinks it is important to motivate her students at all times. “Something as simple as cheering them on during a drill made them motivated to come to my class.”

When comparing assessment practices for boys and girls, both are tested on their skills, written tests, and projects in the same way. The assessments for both are similar if not the same.

**Motivation**

Christine observes that girls appear more motivated when traditional games and skills are modified and when the students perceive the class as fun. Girls are highly motivated when they receive positive feedback. If feedback is perceived negatively, the girls can become amotivated, highly sensitive, and then frustrated with themselves. Christine feels the girls respond positively to her as a young female teacher. “They perceive me as being a girly-girl who also likes to play sports, and they offer me a lot of respect.”

Keeping girls motivated is the biggest challenge Christine faces as a teacher. Social dynamics strongly influence a class’ motivation. If a range of abilities is present in the class, girls withdraw from participation. “If I have athletes in the class, there is a lot more motivation present; [girls] become less motivated when they perceive themselves to not be athletes.” The social dynamic and self-perceptions by many of her students are very upsetting for Christine. “They have a façade or idea that they don’t see themselves as being athletic or looking like what an athlete is supposed to be like. I think they have the idea that being an athlete is not the role of a female.” The social dynamic in the class strongly influences girls' motivation to participate and belong. Girls will gravitate
towards participating in sports that are considered to be mainstream for their gender; such as skating, figure skating, track, dance, and gymnastics, but participating in hockey would be frowned upon. Christine gives an example of such disinterest in sport. Despite attempts to highlight special opportunities during a soccer unit, like the use of a high technology turf field, the girls responded with, “It’s no big deal, we don’t like soccer,” and a low level of motivation remained.

Self-perception of a healthy body image by the girls is skewed, influencing motivation to participate in PHE. They prefer the look of a skinny girl compared to the athletic girl who is strong and muscular. They don’t want to look like the athlete. “I think that the image of an athlete and their body is a masterpiece by which it can do amazing things is not emphasized to girls.” Christine's girls lack motivation when they are concerned about getting sweaty and having to be too physically active.

Christine observes that boys are highly motivated in PHE. She increases motivation by increasing the level of competition in the class. Boys appear less motivated when they are in a unit that they feel is un-masculine like dance, or if they feel a class is moving too slowly, “They become defiant when a class moves too slowly, and they goof off and wrestle each other.” As a female teacher, Christine faces more challenges keeping the boys motivated compared to the girls.

Darcelle

Experience in Sport

As a recreational athlete, Darcelle played many different sports including volleyball, basketball, soccer, baseball, curling, and football. Participating in sports was
her passion, along with achieving personal fitness by working out in the gym. Darcelle has maintained her involvement in recreational sport by acting as a coach for basketball and volleyball teams at the junior girl age group.

As a competitive athlete, Darcelle pursued track and field as a sprinter and positively reflects on how her experience as a track and field athlete was truly unique for her. Based on her competitive results, she was offered the opportunity to travel as a high school student to two international competitions, World Youth and World Juniors. Then, as a university student, she was afforded the chance to travel to the United States on an athletic scholarship, where she competed on the varsity track and field team for four years. However, Darcelle’s career was cut short when she suffered an athletic injury in her final year and had to take a break from competition. As a result of the injury, she decided to make the transition into being a competitive coach and returned to her hometown to develop and execute a track camp, which 50-60 kids would attend in the summer. Her motivation to organize the program was the fundraising her hometown had done for her to attend the international competitions as a student. “It was cool to bring that back [track and field] to my community because they were so supportive of me when I was an athlete.”

As a competitive track and field coach, she has acted as the head convener of the regional track and field championships for the past two years. Darcelle reflects on the experience of trying to coach during the political turmoil within the school boards as it relates to extracurricular activities. This experience negatively impacted her involvement with coaching, as she was forced to withdraw for one year against her better judgment.
As a student, Darcelle completed a degree in kinesiology and later finished her B.Ed. Over the last four years, she progressed through her teaching career, doing supply work and LTO positions and has now found permanent work teaching Grade 9, 10, and 12 PHE. Her favourite subject to teach is Grade 9 PHE. Her teaching philosophy centres around inclusion.

It was always really important to me to be involved in activity - the things that I got out of it inspired me to get girls involved in athletics in general. Introducing students to different activities, different sports, different types of fitness is really important to me but also to just make them feel comfortable and know that there’s opportunity for them to grow and develop. I think it is about creating an inclusive environment for young girls to figure out how physical activity fits into their life, and to introduce them to the possibilities that exist in that world because it can look a bunch of different ways.

**Teaching Practices**

Darcelle makes informed decisions on which units to include in PHE based on the range of abilities of students in the class, access by students to the activity in the local community, and whether or not the activity would be deemed repetitive from the students' perspective based on previous experience. During a typical year, she includes the standard sport units such as basketball, volleyball, badminton, and ultimate Frisbee, along with non-typical activities, such as dance and yoga, outdoor winter sports, and power fit/fitness units. Additionally, students taking PHE are afforded the opportunity to get involved with leadership positions and running intramurals or other activity-based events. As Darcelle comments, “I’ve taught PHE five different ways since I started teaching because I just haven’t found a way I really love just yet.”

Darcelle speaks to the importance of modelling the sport units in a way that can be enjoyable by students when there is a range of abilities present. “I try to put an emphasis on game play, but in a way that allows students to enjoy the game.” It is not
simply a matter of throwing students into a game. "If they don’t have the skills, then we need to put them in a situation where they can be successful and use the skills they are developing to interact in a game-like situation.” Darcelle uses modified game play, with an emphasis on skill development, to achieve the game-like situation on most occasions. To grow teamwork and community among students in the class, Darcelle has students lead a warm-up circle at the start of each class to allow for their contribution and ownership over that aspect of the class, but also to control socializing before moving into structured class time. However, these groups are facilitated by Darcelle; she rarely lets students select their own partners to ensure that there is a fair matching of abilities amongst students.

When comparing teaching practices between boys and girls, Darcelle models her classes differently. With girls, she incorporates a lot of skill practice and modified game play, where, when teaching boys, she feels she has to start game play within the first 10 minutes, or they become distracted.

**Assessment Practices**

Throughout a class, Darcelle offers constructive feedback that is mostly positive and focuses on a specific improvement versus simple encouragement such as “Good job.” Additionally, she facilitates peer feedback, where students are matched to help review performances.

Darcelle feels strongly that the Ontario PHE curriculum for Grades 9-12 needs to be updated. As a result, she only uses the documents as a reference: “They are 14 or 15 years old; it’s kind of ridiculous.” She has been influenced by the *Growing Success* document that speaks to assessment models; however, she finds contradictions in the
directive that teachers use the most recent and most consistent performances as final assessments, in combination with daily assessments to increase the total number of data points for each student. At the same time, teachers are being asked to limit the total number of summative assessments for each student. Typically, Darcelle limits assessments to presentations, reflections, and assignments, with an additional emphasis on daily participation and “being there and being active.”

When comparing assessment practices between genders, Darcelle uses the same assessment practices for both boys and girls, but is still developing exactly what those assessments in PHE should look like. Darcelle is careful of her tone when delivering feedback to girls compared to boys, as the former can interpret constructive criticism negatively. With boys, Darcelle is much more direct and observes that boys either listen and make adjustments or completely ignore the feedback.

**Motivation**

Darcelle observes that girls are most motivated in PHE when the classroom environment fosters the development of social relationships. Working in groups, cheering each other on, and listening to music are tactics that have notably increased motivation for girls. “Often in Grade 9, a lot of the girls don’t know each other, so through facilitating groups of equal skill level, girls have a positive experience in the activity, and are able to encourage the varying abilities of each student as a team.” On the other hand, Darcelle monitors closely the attitude of the “athletes or skill students” in the class, who generally are the most motivated. “Often they possess high levels of motivation and can react negatively in [groups] if someone can’t do something as well.” Additionally, conflicts between girls outside of PHE can be brought into the non-typical classroom
space of PHE and result in amotivation. “Girls draw things out and talk behind each other's backs. We talk a lot about keeping the PHE space positive.” Darcelle as the teacher directly impacts the level of motivation her students possess. “I have to be excited, and I have to be someone that they can talk to. I want them to know everyone in the class, enjoy our company, and create a positive environment.” She is a positive role model to the girls, with regards to staying motivated in PHE.

The biggest challenge Darcelle faces is keeping girls excited and engaged in the activity, wanting to learn. “By nature, [girls] like to learn, want to learn to get better, and they want to have that piece where they’re figuring out what the sport is like.” However, if girls are disinterested in a topic, they arrive without their uniform or excuses like “I feel sick today, I can’t play.” Girls can be demotivated in PHE based on previous experiences in PHE during elementary school.

They may not have had the opportunity to play or be successful, and they’ve felt like there was a bit of an emphasis on winning or losing. In the co-ed environment, many of them commented that they have felt excluded and tend to pull back and not be very involved.

Girls become less motivated if they feel that constructive criticism is negative. “In those instances, girls will roll their eyes and then act like I am being an overly horrible person, and withdraw.” In contrast, boys are most motivated when they feel a sense of competition with their peers, or the chance to “be first in a tournament, or beat that other guy in the class.” Boys are much less motivated when they have to participate in skill development. “Guys just want to go out and play, they’re not engaged in getting better at something, they’re not engaged in improving their skills. If they don’t like something, they are not going to try.”
Experience in Sport

Jess had experience in PHE as a recreational athlete and teacher. In high school, Jess was involved in volleyball and rugby and played basketball as a part of the Ontario Basketball Association (OBA), which allowed her to participate in many different local tournaments. In university, she continued to play sports at the intramural level, being involved in basketball, volleyball, and golf. Currently, she plays on a variety of local, recreational, community teams a few times a week. Jess was never involved in varsity sports nor has she played sports at a competitive level.

Jess completed an undergraduate degree in Physical Education and then went on to complete her B.Ed. She has been teaching for the last four years, having found permanent employment. Her class portfolio includes co-ed Grade 9 and Grade 10 classes. With Grade 9 girls, Jess notices the “huge drop-out from their activity levels…and their change in willingness to sort of get up and get moving.” She challenges this behaviour by encouraging them to get involved in as many things as they can. She talks to the idea of self-improvement, that it should not be about competing against one another, but instead about bettering oneself, and reaching one's own personal goals. She has found success with this strategy and feels that "it helps them [girls] buy in [to PHE]."

Jess’ personal involvement in sports was “huge” in influencing her teaching practices. “I’ve always loved moving and just being as active as I can, and I think that has sort of been my philosophy [for being involved in sports] that I move because I can, because there are lots of other who can’t move for a variety of different reasons.” Her love for being active has driven her to encourage kids to stay active as a teacher.
Additionally, Jess speaks to her comfort level in her skills for a variety of different sports, and how she feels that comfort level makes her more confident in front of the students as a seasoned athlete. It also affords her the chance to offer an attitude of sportsmanship and teamwork practices in the classroom.

**Teaching Practices**

As a permanent teacher, Jess has a lot of decision-making opportunity with her classes. During the year, she teaches many standard PHE units such as volleyball, basketball, floor hockey, and games of low organization. There is a large emphasis on a fitness unit, where students complete fitness testing three times throughout the year and monitor how they achieve of their projected goals. The school is located in a rural area, so special offerings, such as guest instructors or unique classes, are limited, but Jess has taken her students to the local ice rink for hockey and skating units.

The progression of a typical PHE class that Jess is teaching starts with singular skill-focused activities, moving on to skill-based activities, and then into modified game play. Eventually, she facilitates regular game play as a whole class activity. “I like to start with something pretty simple, and work up towards there [game play].”

When comparing teaching practices to boys and girls, when teaching co-ed classes, Jess has the class follow similar class designs, but when teaching genders separately she includes more game play for boy classes, and more skill development for girl classes.

**Assessment Practices**

Jess asks students to complete self-assessments, while considering the questions, “How well did I understand the skills used today? Do I feel confident in performing
them?” Student self-assessments help her to gain perspective, in particular with the students who are not enjoying themselves or struggling with a skill. Additionally, Jess offers verbal feedback on a regular basis. She tries to monitor her tone to ensure that it is received positively. Often, she has included the use of videotaping, which is time-consuming but has greatly directed student learning. The students generally respond with, “Oh, I didn’t realize I was doing that!” and then make positive adjustments to their skill.

When completing summative assessments, Jess fills out a detailed rubric that captures the set performance skills for a unit, including knowledge and application, participation levels, and learning skills. As an example, the rubric for the basketball unit includes criteria such as whether or not the basketball for the layup goes in, whether or not you’re thinking about your technique, and the strategy that you’re using to actually get to the net. “They [students] learn the cues, and they’re tested on those cues.” Jess finds these rubrics incredibly helpful, especially in that they can easily be modified for each unit. Furthermore, students are offered a choice as to the units on which they will be evaluated. Despite Jess’ attempts to communicate that the assessments are based on the willingness to develop skills and try something new, not overall performance, many students are unwilling to take a risk in making this choice. Jess tries to facilitate that decision-making process by having peer discussion groups about the decisions being made.

When comparing assessment practices between boys and girls, Jess models similar practices, and offers choice of assessment topics to both populations. Jess offers similar feedback to both genders. “I think all kids want to feel praise for the things that they’re doing well. I’m hoping in my class that they have a good enough understanding
and a big enough rapport with me to see that when I offer constructive feedback along the way they can turn that into positive.”

**Motivation**

Jess observes that there is a large drop in participation levels of girls in PHE, especially in Grade 9. “They lose their willingness to get up and get moving, and I feel this is the biggest challenge with this population.” Pre-conceived barriers or perceptions of PHE impact their willingness to engage in PHE. The range of ability within a class strongly influences the motivation levels.

I’ve had a PHE class with girls who are very confident and very athletic, so they are more comfortable, and I think that’s based on their exposure to sport. On the other hand, in a class where not many girls have been exposed to sport a challenge is there.

To motivate girls, Jess tries to expose them to topics in which they are interested. So that they will buy into the class content, she also incorporates goal setting. These strategies have worked well in increasing levels of motivation.

Social dynamics play a strong role in the motivation and levels of participation presented in class. “They are very conscious of each other and watching each other and seeing how they’re engaging with the people in the space, teachers, the other students, etc.” The group mentality of girls can be very detrimental to performance, and female leaders in the class can either raise positivity and feelings of engagement or bring everyone down. Girls are influenced in PHE by their body images and how they move in general. “They are not very comfortable in this environment and are often very timid to jump right in. They require coaxing in order to be willing to try something new.” Girls are motivated to continue their engagement in developing a skill when they start to observe improvement. “They seem to understand that when we have that repetitive,
rigorous practice of a skill, they do improve. They seem to work better when they are independent and practicing something with a partner.” On the other hand, girls decrease in levels of motivation when they are put on the spot in front of the class during a skill demonstration, especially if boys are present.

Boys are motivated to participate in PHE in a “rough and tumble, just right in there kind of way,” when compared to females. “They are not self-conscious of their performance, despite awkward limbs.” Boys are motivated to participate in class if there is game play but do offer attitude if they are not interested in the topic being covered. Boys rarely come to class with an excuse. “Even if they have forgotten their uniform, they are willing to participate in their own clothes or take a pair of shorts from me. They just want to participate.” Jess is more challenged by behavioural issues with boys, such as swearing and roughhousing.

**Summary of Female Participants**

The female participants (Darlene, Christine, Darcelle, and Jess) described their personal experience in sport and how it has influenced their teaching philosophies, their use of teaching practices with adolescent girls (and boys) in PHE, their use of assessment practices with adolescent girls (and boys) in PHE, and their comprehension of motivational behaviours of adolescent girls and boys. Highlighted below are the key similarities and differences across these participants.

All four female participants described their personal experiences in sport as positive. Despite these experiences being different for each participant, they were closely connected to their initial desire to become a teacher and their ongoing involvement in
sport. All participants described experiences during professional socialization as positive, but Darlene was the only participant who highlighted that content covered during her studies as a master’s student were the most notable in influencing her current teaching strategies when working with adolescent girls. As permanent teachers, organizational socialization for Jess and Darcelle had occurred differently than that of Christine and Darlene, who had only been supply and LTO teachers. All four female teachers had very similar teaching philosophies for adolescent girls that focused on striving to make connections between students and sport/physical activity in a way that would meet their personal motivational needs.

Teaching practices utilized by the four participants were similar, in that they taught girls a range of sport topics and often included fitness activities. They selected topics that they felt were appropriate for their classes, excluding Christine and Darcelle who were limited in their decision-making opportunities as a result of LTO and supply teaching positions. All participants modelled similar class designs and ensured that students were aware of learning objectives at the start of a class. Jess was limited in offering any special courses or guest instructors for her students due to the rural location of her school but tried as often as possible to include added value topics for the girls.

Female participants employed similar assessment practices and incorporated direct teacher-to-student feedback, peer feedback, self-assessments, and group discussions. Jess regularly used technology to support her assessment practices, which had been successful in motivating adolescent girls. All participants modelled positivity and were mindful of their tone when delivering feedback to their adolescent girls who could be highly sensitive as a result of their self-perceptions. It was apparent that Darlene
and Darcelle felt strongly that PHE curriculum needed to be updated and that the expectations from the government in the types and numbers of assessments completed were unreasonable. All study participants described that they were still developing their assessment practices for PHE.

Female participants described similar amotivated behaviour of girls, including the use of excuses, presentation of attitude, and increased rates of talking with decreased levels of participation. They also highlighted that girls were influenced by social interactions with their peers. All four participants felt that their age and gender (young and female) influenced the adolescents and increased feelings of relatedness with their girls and encouraged them to participate in class more actively.

Steve

Experience in Sport

As a child, Steve played level AAA-AA competitive hockey and baseball. He continued into university to play varsity athletics for four years on the baseball team. Transitioning into the role of coach post-university, he has continued his involvement with the varsity baseball program for the last three years. Steve also coached an elite junior level boys’ baseball team. As a part of his teaching assignments, Steve acted as a volunteer coach for both a male and a female hockey team.

During university, Steve completed a degree in Kinesiology and continued into a B.Ed. program, where his teachable subjects were PHE and science. As a third year teacher, Steve has worked as a supply teacher, having held one long-term occasional (LTO) position. He has taught a “mixed bag” of PHE classes, including both girls’ and
boys’ PHE classes. Additionally, he has had the opportunity to teach power-fit classes, which are co-ed specialty classes that can be offered within the PHE curriculum. These classes focus on strength training versus sport and physical activity units.

Steve identifies a large connection between his experience as an athlete and his teaching philosophies when working with adolescent girls and boys. He has gained leadership experience, understanding of commitment and dedication, an appreciation for interacting with people, and improved classroom management skills, all skills that he brings to his classroom.

Athletics in general has really molded my teaching style significantly….If I wanted my team to respond a certain way, this is how I need to deal with the situation, so no question, it’s a significant influence [experience as an athlete in sport]. There is an entertainment value to teaching. Kids need to enjoy themselves, but I also try to gain some respect at the start of the class, identify at the beginning of every class what the goal is and what they need to accomplish, and try to say up front, “hey we’re going to enjoy ourselves, but there’s a job that needs to get done, and here it is” and work towards it [as you do in coaching].

Teaching Practices

Steve lists badminton, soccer, GLOs, floor hockey, and baseball as typical units he has taught through his supply and LTO teaching experiences. “In my general, open PHE classes we teach every sport; you name it.” He also highlights the inclusion of less typical units such as international games like European handball and Aussie football, along with power fit and fitness classes. Often girls in particular have requested classes that focus on weight training, so he has honoured those requests on occasion too. “I think it is really important for girls nowadays to be doing things like Crossfit and real-world applications; they need to be equally as strong as males.”

Steve positions his teaching around the philosophy of “We’ve got a job to do here today, and here is what we are going to do,” and offers his class a clear definition of the
learning goals and what he wants the students to accomplish. Clarifying learning goals at the start of a class is his most important take-away from the Ontario Assessment and Evaluation Reporting documents. Skill development starts first as a class discussion and then moves into individual practice where students have time to work at their own pace. At the end of the class, Steve facilitates game play.

When comparing genders, Steve would make no changes in the way he teaches boys to girls but may make modifications based on skill ability and developmental progress of an individual class. “Girls can be just as athletic as guys. I would [teach] exactly the same way.”

**Assessment Practices**

Steve performs a range of assessments throughout a unit, including diagnostic assessments, to find out what his students know about a particular sport. He conducts formative assessments through the use of feedback such as, “Here’s what you’re going to want to do. Here’s where you’re at. Here’s where you can go.” His intent is to foster improvement in skill. He also facilitates self-assessment and peer feedback where the students need to reflect on their own performance and on those performances of their peers. To support self-assessment and peer feedback, Steve incorporates the use of technology (iPads) that allows students to watch their own performance and reflect on their own technique. Many of his evaluations are multi-faceted in being both assessment as learning and assessment of learning, as requested by the *Growing Success* document. Evaluating students on written work in the PHE environment where he has only taught them assignments seems unreasonable in his opinion. Thus he focuses his assessments on student responses to game play and strategy execution and participation, while offering
continuing discussion throughout a lesson. “It offers the opportunity to analyze teachable moments to themselves in following this model.” Steve describes his feedback and assessment practices as being “frequent” so there are no surprises for students at the end of the year.

Steve would not differentiate assessment practices between boys and girls, but he is mindful of the approach he takes when delivering feedback. “I may be a bit harder on the guys, pushing them through a class. Girls are a bit more of an emotional being.”

**Motivation**

Girls appear motivated when learning goals and class activities are outlined clearly at the start of a class. “Being prepared when I arrive to class has been a defining factor in whether or not the kids are motivated [to participate]. They know what they need to get done and do it.” Steve highlights an increase in motivation when he observes girls interacting in a group, delivering feedback and discussing strategy together. Additionally, girls appear more motivated when they are offered the opportunity to perform their own self-assessments. Intrinsic motivation has been apparent to Steve in individual students who take the initiative to ask him for help in specific PHE activities such as fitness exercises.

The greatest challenge Steve has observed is keeping girls engaged in the class and gaining their respect, keeping them on task, and fostering intrinsic motivation. Steve tries to foster an environment where the girls should feel motivated because he believes they can do anything to which they put their minds. “If girls do not want to participate in an activity, then they are not going to participate.” However, as a young male supply teacher, Steve feels challenged by his gender. “The girls are interested in attending the
class and think I am a cool, young guy, but they become wrapped up in whispering and talking and are not motivated to engage in the lesson.” The girls become “giddy and unfocused.” In contrast, Steve observes that boys are hard workers and generally motivated in PHE; however, they too often appear to “have their head in the clouds.”

**Dave**

**Experience in Sport**

Dave has been a part of the school board supply list for four years and has been involved in teaching a range of both girls’ and boys’ PHE classes. Having been frustrated by the limitations in teaching opportunities in the classroom, Dave created for himself an alternative employment opportunity that still involved coaching and teaching. Dave opened an adolescent youth training facility that focuses primarily on the development of youth hockey players. The training facility has approximately 40-50 youth who train regularly throughout the week, with a gender split of about 10:1 adolescent boys to girls.

As a competitive athlete, Dave was focused on the sport of hockey. Entering high school, he was recruited into the Ontario Hockey League (OHL) where he played for four years. When he was not drafted to play in the National Hockey League (NHL), he pursued education, completing his undergraduate degree in Physical Education followed by a B.Ed. in PHE and science. While completing his undergraduate studies, he competed on the varsity hockey team for four years.

Dave reflects on how his experience as an athlete has shaped his teaching and coaching philosophy for adolescent girls and boys and how he applies similar principles when working with each gender. He highlights that he has more experience working with
boys than girls comparatively, but he makes observations of girls’ behaviour. “They’ve got a lot of hormones—they need to be kept focused and working towards a common goal.”

I would say that just the development through sport and teamwork, working towards a common goal, setting goals, the learning aspect of sport and coaching has helped with my teaching. The teamwork and group dynamics all contribute to work inside the classroom.

Teaching Practices

As a supply teacher, Dave has had limited experience teaching an entire unit to a PHE class. When he is called in for work, he is usually asked to instruct a standard PHE unit, such as basketball, volleyball, badminton, softball, or GLOs. On occasion, if the school is aware of his hockey background, Dave is asked to run a floor hockey class. He has not been offered the chance to teach or be involved in any special PHE course offerings. From the standpoint of a fitness instructor at his fitness facility for developing youth, hockey players, Dave supports students in following moderate to difficult fitness routines that focus on endurance and strength, in addition to skill-related components of physical fitness including agility, power, reaction time, speed, coordination, and balance.

When instructing a PHE class, Dave is sure to incorporate a warm-up, whether that is a set of drills or a cooperative game. Then he moves into skill development, finishing off the class with game play. Dave ensures that he highlights the class objectives at the beginning of a class, as dictated by the permanent teacher, but he is limited in measuring the achievement of these goals by individual students, as he rarely knows their names. Instead, he can only offer generalized reporting back to the permanent teacher on the performance of the class as a whole. A similar model for instruction is present in his fitness facility. Youth are instructed to complete their
individual warm-up and then approach the coach to complete the designated workout. The athletes are in either an individual or group setting when completing the workouts. Dave observes that boys require more game time play; “they just want to go at each other” compared to girls, who prefer to gain an understanding of sport through skill development.

**Assessment Practices**

Despite not having his own classroom, Dave understands the importance of assessment practices. In his own classroom, he would place the emphasis for evaluation on participation levels, with evaluation criteria being focused on attitude and level of focus. Additionally, summative assessments for a sport unit would include the evaluation of performance in a particular skill and a written quiz associated with the unit that emphasized game play and skill development.

During a PHE class, Dave offers feedback frequently and discusses the students’ achievement of form and learning objectives. As well he uses that time of interaction to assess the students’ comprehension of the goal at hand. “I usually try to see if they understand what they are doing, why they are doing it, and how they feel they can do it better, and apply it to a game setting.” Dave feels that the curriculum documents are fairly broad and that unit selection and feedback practices can be interpreted as deemed appropriate by an individual teacher. In his training facility, feedback is offered in terms of technique during a workout for safety purposes and for motivation purposes, while formal analysis of performance is bi-weekly, as fitness development requires periodization (a length of time) to see change.
When comparing assessment practices for boys and girls, Dave keeps them standard for each gender. Dave is mindful of the tone of feedback he offers to girls in his classroom. He adds that this feedback is different for the female athletes he sees in his training facility. “Those girls respond well to any type of direction given.”

**Motivation**

The social dynamics within Dave’s classes can positively influence motivation levels of girls. “They’re very social, so using group settings and group dynamics to get the purpose of the class through can be helpful.” Alternatively, social dynamics can offer a challenge in keeping girls motivated. “They will group themselves together and not want to separate from their friends or decide they don’t want to participate if another [student] decides the same thing.” Perceptions of skill and ability by girls can have a significant impact on levels of motivation. Dave often pairs students with stronger athletic ability with those who don’t necessarily want to participate. “I try to use [athletic] students as leaders to push the others [less athletic students] and keep it fun. I think it’s a good way to keep them engaged.” Building rapport with his students is another motivating factor. If girls feel comfortable with the teacher, they are more likely to participate. Challenges arise when girls do not want to participate and offer a range of excuses, including “not getting sweaty.” When girls are amotivated, they become overly chatty and social. Finding a focus and quieting them down becomes difficult.

Conversely, boys are highly motivated in PHE. A challenge Dave faces when motivating boys is aggressiveness and attitude. “They just want to go, go, go, and switch games.” To keep boys motivated, Dave picks an appropriate spot to stop the class to do some teaching before moving back into a game play setting. If a class is too slow, the
boys revert to aggressive behaviour and offer attitude. The behaviours of girls and boys in Dave's training facility are different from those in the classroom. The girls and boys who show up for training are highly motivated and ready to work hard to achieve their goals.

**Finn**

**Experience in Sport**

Throughout high school and university, Finn was a competitive wrestler and competed at the varsity level for four years. His participation required a high level of commitment to the team in attending daily practices and tournaments. Wresting presents unique challenges with its steep learning curve, as the opportunity to practice is not made readily available in PHE classes or considered “appropriate to do out on the street with friends.” Finn was heavily involved in intramural sports as well, such as soccer, ultimate Frisbee, and inner tube water polo, all of which exemplify sportsmanship among teams and teammates. Finally, Finn was involved in aquatics, teaching swimming lessons to a range of ages and genders, focusing on stroke correction, fitness, and endurance. He attributes his involvement in aquatics to being the foremost reason he became a teacher.

Finn completed his undergrad in Physical Education and continued into a B.Ed. program, where his teachable subjects were PHE and history. As a second-year teacher who is hired as a supply teacher, he has taught a range of co-ed PHE classes and single-sex girls’ and boys’ PHE classes. As a coach, Finn has helped with co-ed wrestling teams on a volunteer basis at the schools where he has been a supply teacher. He speaks to the positivity of the girls’ behaviour on these teams and how they appear highly motivated,
even though they are at basic levels of entering the sport. Often, they even partner with males.

Finn believes it is important to impart to adolescent boys and girls the importance of putting their minds to whatever task they are trying to complete, as their efforts can go a long way, and to help them realize their worth in PHE, with his biggest emphasis focused on instilling motivation. These are lessons he feels he has learned first-hand through the wrestling community.

It is important to establish connections so that they [girls] can keep making the next step, and keep making the next step, and not feeling embarrassed or ashamed of what they’re doing or comparing themselves to the boys and thinking that because they can’t achieve what boys can or males can, sometimes that is any less important or not valuable.

**Teaching Practices**

Finn has experience teaching a range of standard PHE units, including soccer, baseball, and fitness, to name a few. Finn has enjoyed supporting the intramural sport program in which students in PHE tend to become involved. “The intramural sport program seems to get some of the students who are a little shy in class out of their shell a little more.” In particular, the dodge ball intramural was a big success for some of the quieter and shyer girls. Of particular interest, Finn finds regular supply work at a school where he instructs PHE units over an extended period of time. As an example, soccer, fitness, and low organization games were all taught over a period of one month, with each day of the week allocated to a particular sport. As a result of this scheduling, students were able to continue to play the same sports for a longer period of time. “This model is good and bad at times. In some ways, the students don’t get burned out. In other
ways, it is difficult to build upon skills as they have not had the chance to practice repetitively.”

When instructing his classes, Finn tries to make connections between the units he teaches and his students’ interests outside of school. However, he tends to be limited in doing so by being a supply teacher. For example, if the student is a dancer, he or she may want to know how the PHE activity contributes to flexibility. If the student is a runner, he or she may want to know how the PHE activity contributes to endurance. Unfortunately, “I am just given a class, with a general outline of how the class is going to run, and I really don’t have a huge amount of time to steer it one way or another based on the students.” In this respect, Finn is limited “because I don’t have enough time to get to know their names, let alone their interests.” Finn formats game play in girls’ classes as a round robin or skill competition, compared to boys’ classes where it is highly competitive.

When comparing teaching practices between genders, Finn would absolutely model classes differently. The emphasis for males needs to be on competitive “winners and losers.” For females, he emphasizes maximum participation, where everyone gets a point for something she achieved in the game.

**Assessment Practices**

As a permanent teacher, Finn would focus his assessments on participation, motivation, attitude, and compliance, offering daily evaluations. When completing summative skill evaluations, he would place the emphasis on development versus execution, to make sure the students are making improvements. “It’s not necessarily
about getting the ball into the net, but that they have tried x amount of times to do it properly.”

Finn always offers positive feedback to his students. “It’s especially important to notice when someone does something and they really hated it. They really think they did a bad job, yet they’re trying a skill that they’ve never done before.” It is important to foster confidence in the classroom so that negative situations can be spun into positive ones, to reinforce a positive outlook for students when they are trying something new.

When comparing assessment practices for genders, Finn feels that most assessments would be the same for both boys and girls, excluding learning skills, where a greater emphasis would be placed on attitude and a willingness to learn for the girls only, as often they show up to class without an appropriate attitude. When delivering feedback, Finn would keep comments positive and focused on skill development for both genders.

**Motivation**

Finn compares his experiences working with girls in co-ed classes to the girls in his single-sex classes. His interactions with the females in the co-ed class are more positive as the girls tend to be “highly motivated, really wanted to either play sports, play on sports teams, or they were physically active in the sense that they were looking to improve their fitness and just get better at sports in general which was nice.” In comparison in his single-sex classes, he observes that “one-third of the girls wanted to be there, and the other third were not motivated at all and didn’t want to be there, would come up with excuses, purposefully forget their gear, or try to say they were sick.” Finn is also aware of the mindset that many girls have in his single-sex classes: “That it’s pointless. If it’s not a girl thing, they don’t want to, it’s kind of boyish, and that’s not
what they should be doing.” He observes that most often female classes are assigned to female teachers to facilitate change room and related behaviours.

Finn observes a range of motivational levels when teaching adolescent girls. Typically, he identifies 1/3 of girls in a class as athletes, who enjoy sports and being active; 1/3 of girls in a class of moderate skill, highly motivated during some activities and less motivated during others. The final 1/3 of girls is totally disinterested in PHE. Finn feels that girls are highly motivated during skill development and modified game play. They maintain a positive attitude when they are having fun and when everyone is participating.

Finn has found success in maintaining levels of motivation when girls are able to assign themselves to tournament groups based on their self-perception of skill. Girls “look at the players on the side of the gym they’ve selected (beginner, advanced, or moderately skilled) and feel comfortable knowing they belong where they have landed, and are able to move around as they feel they are improving.” Additionally, Finn sees an increase in motivation if girls make a personal connection to a topic in PHE and their life outside of school. “If girls can find that connection outside of PHE, and recognize the connection to their personal interest, it makes an impact [on their level of participation].”

Finn observes the influence of social dynamics in a class of girls on motivation. He has observed a positive impact on motivation, where less athletic girls are on a team that wins a huge tournament and are celebrated for their contributions. On the other hand, social dynamics can negatively impact girls’ motivation to participate.

The negativity feeds off each other. I will notice that there will be pockets of [girls] that at first are all spread out through the class, but by the end have gravitated to each other, which multiplies that negativity tenfold. It’s much harder to motivate a group of girls banded together than work with them individually.
Finn believes that because girls are not observing many women playing competitive sports, their level of motivation and confidence to be involved in PHE is reduced. Their perception of sports is skewed and perceived as only a “male thing,” which leads to disinterest. Often they say, “It’s pointless, it’s not a girl thing, I don’t want to participate because it’s boyish and that’s not what they should be doing.” They also feel that they lack the abilities to achieve what boys can in PHE. As a young male teacher, Finn believes that his presence in the classroom motivates some girls in the class to participate in PHE, as it is “out of the ordinary” for them to have a male teacher. “They become giggly, with lots of questions, and very outspoken.” He also observes that it can decrease the motivation of other girls in the class, who become shy and standoffish.

In teaching boys, Finn feels they are most motivated to participate in game play, and they become bored with drills very quickly. “They want to win, they want to lose, and then want to walk away talking about how their team won or who scored the most goals.” Skill development can be difficult, as boys’ competitive nature works against their motivation to participate. Finn is challenged by having to incorporate skill and activities, knowing that the boys will be much happier by the end of class when they are able to engage in game play. “If it was up to them, they wouldn’t do any skill development stuff at all.” When boys don’t get their way, they become whiny or aggressive. The level of competition also requires a heavy presence of refereeing to avoid conflict.
Pete

Experience in Sport

Pete has had experience in PHE as an athlete, coach, student, and teacher. Pete participated in a variety of recreational sports throughout his childhood and adolescent years, including hockey, soccer, volleyball, and rowing. He transitioned into playing competitive sport in university and, in fact, played at the varsity level for volleyball, rowing, and ultimate Frisbee throughout his five years of eligibility. In all three sports, he found major success in his athletic performances. While on the volleyball team, he won two Ontario University Athletic (OUA) championships. In rowing, he placed fourth in Canada, and in ultimate Frisbee his team won two championships. Pete speaks most highly of his experience with the ultimate Frisbee team and its environment. He feels ultimate Frisbee was less dictated by parents and referees and instead controlled by players. “I think it is a good model to pursue when possible.”

Pete speaks to his experience as an athlete with coaches who possessed a variety of different coaching styles. These different styles had a significant impact on his experience in sport. On one volleyball team, he had a “bad coach,” who offered little by way of motivation, with limited encouragement or variety in his coaching practice. In comparison, he discusses a “good coach” and the impact of quality coaching that focused on technical feedback and high-level game play had on his performance. He is reflective in recognizing the differences in his attitudes towards the respective teams, and his performance differed in each circumstance. Pete reflects as well on the feelings he previously experienced as an athlete when coaching adolescent girls and boys. Pete transitioned into coaching, alongside his father who was a competitive volleyball coach.
for many years. He makes connections between his father’s sport involvement and the influence that had on his involvement in sport.

Pete completed his undergrad in Physical Education and went on to complete his Masters in Human Kinetics (HK) where he investigated sport-related body movement principles. Later, he went on to complete his B.Ed. in PHE and science. As a graduate student, he believes that he gained many perspectives that have shaped his coaching and teaching philosophies. Specifically, Pete completed a course titled *The Art and Science of Coaching*, which helped him to piece together his personal positive and negative experiences in coaching, and combine them with fundamental principles of long-term athlete development, seasonal planning, and developing progress across a week or a year. Additionally, peers within the HK graduate school who explored sociocultural factors often shared their perspectives with him. Through academic discussions with his peers, he grew to appreciate and cultivate his philosophy of teaching and coaching, to reflect on the notion that sport can be discriminatory at times, and to understand that it is important to address those factors.

As a first-year teacher, Pete found a permanent teaching position at a private school. His class assignment included co-ed combined PHE classes for Grades 7-9. Pete observes that there are less active groups of females within the classes, which he has addressed by trying to focus on promoting the positive and enjoyable aspects of sport to them to try and engage them in participation. Additionally, he has frequently observed negative commentary, such as “that’s so gay,” within the males in the class who lacked interest in participating in a specific sport. He needed to monitor the class environment
intently to correct those behaviours observed and to ensure that the students would gain an understanding of what they were really saying when speaking in that way.

**Teaching Practices**

As a permanent teacher, Pete has considerable input on the units in which his class participates. He tries to select activities that allow his students to become well-versed in the individual aspects of athletics and that are transferable to being active outside the classroom. For example, he has included topics such as rowing, yoga, ultimate Frisbee, rock climbing, cross-country running, hiking, and beach volleyball in his PHE schedule. As Pete teaches at a private school, he has access to many high quality PHE facilities.

A standard PHE class is structured with students gaining awareness of the learning objective. They then move into a warm-up, which usually consists of a cooperative game challenge. Pete next engages the class in practicing drills. As an example, for ultimate Frisbee, the progression of skills might go from basic throws to drill execution. For rowing, it might be learning the basic stroke and then moving onto 30 perfect strokes in a row. At the end of either class, Pete facilitates game play. However, as there is a range of abilities in his class, a detailed rule explanation is usually required.

When comparing teaching practices to gender, Pete does not differentiate and does not feel he should, based on gender. However, he comments that for senior PHE he would differentiate some skill development and technique, as certain sports require it (e.g., rowing has a shorter stroke pull for females than males).
Assessment Practices

Pete encourages his students whenever he can by offering them positive feedback. “I want them to know they are doing great, and sort of have fun with them, to encourage them to be active and enjoy the experience.” When offering feedback related to skill, it is formatted as group discussion versus individual directive conversation, so that students do not feel singled out. This technique is manageable because of his small class size.

Summative assessments are usually focused on presentations or assignments, where students are asked to present an aspect of the game through skill or drill, and then explain to the class the value of the activity. Pete evaluates the students using the standard Ontario Curriculum Assessment and Reporting Document that follows a four-level rubric. “I think it’s important for students to develop the presentation skills as well as to become comfortable working in classes, to appreciate how frustrating or challenging it can be when groups of students are not paying attention,” which also connects to their reflection on their own learning skills and behaviour in class. Pete regularly has students perform a written self-reflection where they rank themselves in terms of focus, attention, participation, and overall engagement within the activity that day. Pete does not differentiate his delivery of feedback between genders, and he keeps all assessments the same, as he teaches within a co-ed classroom.

Motivation

Pete observes that girls are motivated to participate in units to which they can relate and are of interest to them and that they offer particular interest to non-typical gym activities, such as rowing and rock climbing. The highly athletic girls in a class enjoy all aspects of PHE and are willing to participate at all times, while there is also a population
of less active girls, where motivation seems to be a challenge. The less active girls become more motivated when Pete promotes the enjoyable and positive aspects of sport and makes connections to their life-long participation in physical activity. Pete highlights that, in general, he finds his girls to be more motivated than not motivated, within the small class sizes at the private school where he teaches.

The co-ed nature of some PHE classes can offer some challenges with regards to motivation. The presence of competition can strongly influence girls’ willingness to participate. “The girls in the group are less keen to jump into a game when guys are wrestling over a basketball, but I can understand why.” Additionally, males can be exclusionary towards the girls, causing the latter to become amotivated when they feel they are not wanted. Girls are more motivated to participate in game play that involves strategy, especially when boys are present, as it offers them a greater chance to be involved and removes some level of aggressive competition. Regardless of gender, Pete has observed that both boys and girls exhibit chatting and lack of focus when they are not engaged in a class.

Pete observes that boys are keen to engage in game play but often exhibit more aggressive and competitive behaviour. “The guys in one class always want to play basketball, and be deeply aggressive despite the fact that they weren’t particularly skilled.” They are less motivated when they are asked to engage in new unit topics or to focus on skill development.
Summary of Male Participants

Personal experiences in sport, teaching practices, assessment practices, and comprehension of motivational behaviours were described by the four male PHE teachers: Steve, Dave, Finn, and Pete. Key similarities and differences are showcased.

Personal experience in sport was a key determinant for all four male participants in becoming a PHE teacher and for their continued involvement in coaching. Professional socialization was not discussed in detail, excluding Pete who highlighted the strong influence his studies as a master’s student had had on his teaching and assessment practices. Pete was the only male participant to hold a permanent PHE teaching position, while Steve, Dave, and Finn had been supply teaching and completing LTOs. Dave had evolved his teaching experience into a coaching facility that saw many adolescent girls come to develop their skills.

Teaching practices for all male participants were similar in that they had taught the same sport unit topics to their students. Pete had been able to include a range of non-typical sport topics that had increased engagement of students. Finn described a different mode of instruction that saw students follow multiple units simultaneously that had contributed to increased engagement of students. Male participants were limited in having choice over inclusion of unit topics as a result of their non-permanent employment.

Assessment practices were modelled similarly by all male participants and included direct teacher-to-student feedback, peer feedback, self-assessments, and group discussions. Steve spoke about his use of technology during his teaching. All male teachers talked about the sensitivity they had observed when the girls were receiving
feedback. These teachers were very deliberate with what they said to girls and the tone that was used.

All male participants observed similar amotivated behaviours of girls, described as avoidance behaviours and presentation of attitude, such as rolling of the eyes. Steve and Finn felt their age and gender (young and male) often resulted in disruptive behaviour by girls in PHE. All four male participants indicated how girls were strongly influenced by social interactions with their peers and that social dynamics should be monitored regularly.
CHAPTER 5: DISCUSSION

The purpose of the study was to understand how novice secondary school PHE teachers (years 0-5) approach the teaching of adolescent girls in their physical education classes: How do these PHE teachers’ backgrounds in sport and physical education impact their teaching philosophy, particularly with respect to adolescent females? What teaching practices do these PHE teachers use, particularly with respect to adolescent females? What assessment practices do these PHE teachers use, particularly with respect to adolescent females? What challenges do these PHE teachers experience when teaching adolescents to keep the students engaged and motivated? The discussion and interpretation of findings are divided into two major sections. First, four main themes are presented following the same organization as seen in the literature review and results chapters: experience in sport, teaching practices, assessment practices, and motivation. These four themes are then reconceptualized through three cross-cutting themes: returning to Self-Determination Theory, the influence of gender, and tensions between addressing girls’ (and boys’) learning and teaching in a co-ed setting. Next, limitations of the study are acknowledged and addressed with recommendations for future research. The thesis concludes with implications for practice and my final reflections.

Exploring the Four Themes

This section explores four main themes identified in participant responses and connects findings to current literature. First, experience in sport is presented through an examination of the ways PHE teachers are influenced by their cumulative life
experiences, professional socialization, and organizational socialization. Second, teaching practices, namely, the implementation of course curriculum, unit design and topic selection, and teaching styles are described. Third, assessment practices are explored, as seen in teachers’ use of interpersonal style and feedback, use of specific assessment methods, and students’ self-perceptions of sport ability. Finally, the influence of motivation on adolescent girls’ engagement and participation in PHE is examined.

**Experience in Sport**

PHE teachers are strongly influenced by experiences in sport during cumulative life experiences, professional socialization, and organizational socialization (Capel et al., 2011; Chróinín & Coulter, 2012; Hand, 2013). The social aspects of learning appear to be strong in PHE, with the strength of socialization in teaching PHE apparent (Capel et al., 2011; Chróinín & Coulter, 2012; Hand, 2013). All study participants discussed in great detail their cumulative life experiences as athletes. They described their experiences positively and identified the connections among their involvement with peers and coaches, skills and lessons learned, and their decision to become PHE teachers. Aligned with the research by Capel et al. (2011) and Randall and Maeda (2010), the positive knowledge, ideas, and attitudes perceived by students in these PHE contexts led to their identification and attachment to sport, and often the decision to become a teacher, so that they might replicate their positive experiences for others. Similar to the participants in the studies by Capel et al. (2012), Chróinín and Coulter (2012), and Hand (2013), despite opportunities for growth and guidance in their professional socialization, these teachers generally continued to make decisions influenced by cumulative life experiences to which they had been exposed in advance of teaching practice instead of being guided by
their professional socialization. While research suggests that PHE teachers are influenced by interactions with mentors, training tactics implemented for new teachers, and models of social constructs within school contexts, specifically within the PHE department (Capel et al., 2011; Chróinín & Coulter, 2012; Hand, 2013), no study participant described these experiences, perhaps because five of the participants had never held a full-time teaching position.

**Teaching Practices**

Teaching practices utilized by the male and female participants of the study were remarkably similar, including implementation of course curriculum, unit design and topic selection, and teaching styles. When examining the implementation of course curriculum, many of the study participants were limited in the opportunity to implement course curriculum to their preference, based on the nature of the temporary LTO and supply teaching positions held by new teachers in years 0-5. In contrast, authors such as Gibbons (2009; Gibbons & Humbert, 2008; Gibbons, Humbert, & Temple, 2010) strongly recommend teachers implement a girl-specific PHE curriculum that includes autonomy and competence as imperative to meet the motivational needs of this population.

Unit design and unit selection practices used by both male and female participants of the study followed similar progressions for each lesson, beginning with a warm-up, skill instruction, skill practice time, and game play. Each unit aimed to offer sufficient practice time for students to observe skill progression. Female teachers tended to emphasize fitness units and the use of modified game play, in comparison to male teachers who focused more on sport units. New PHE teachers were using some unit instruction and unit topic habits that have been shown to increase levels of competence.
and relatedness to address motivation of girls in PHE. As Gao et al. (2011), Hannon and Ratcliffe (2006), and Wilkinson and Bretzing (2011) stated, a selection of appropriate topics that offers girls (and boys) a sense of relatedness and feelings of comprehension should increase rate of play and levels of motivation seen by adolescent girls (and likely adolescent boys).

Teaching styles were similar for both female and male participants. All study participants reviewed course objectives with their students, and all participants relied primarily on teacher-centered learning practices to instruct their classes. However, these new PHE teachers were not consistently modelling their teaching style in the optimum way to increase levels of motivation of adolescent girls in PHE, despite making efforts to ensure that students achieved feelings of competence during lesson instruction. Building competence is key to successful PHE teaching practices (Morgan et al., 2005; Webster et al., 2012).

**Assessment Practices**

Levels of engagement seen in adolescent girls are influenced by teachers’ interpersonal style and use of feedback, the use of specific assessment methods, and students’ self-perception of sport ability, as further interpreted by their teachers and peers (Fraser-Thomas & Beaudoin, 2002; Gao et al., 2011; Nicaise et al., 2007; Ntoumanis, 2005; Standage et al., 2006; Tessier et al., 2010). Facilitating feelings of competence by adolescent girls in PHE during assessments is necessary to facilitate increased levels of engagement.

Feedback offered to students was frequent, of a positive nature, and focused on encouragement or improvements for technique when participating in a skill. As such,
PHE teachers were utilizing some interpersonal styles and feedback delivery methods that tend to increase levels of engagement in adolescent girls and boys, which is aligned with current research that points towards the significance of teachers using deliberate feedback methods and purposefully constructing social interactions with students. This kind of feedback and these social interactions have the potential to impact levels of engagement and physical activity in PHE classes (Gao et al., 2011; Nicaise et al., 2007; Standage et al., 2006; Tessier et al., 2010). However, the use of peer assessments has the potential to negatively impact levels of engagement if not properly facilitated by the PHE teacher, based on girls’ perceptions of sport ability, as influenced by the views of their teachers and peers (Ntoumanis, 2005; Wang, Liu, & Biddle, 2003; Wang & Liu, 2007).

Selection of specific assessment methods in the multi-faceted environment of PHE can influence students’ motivation and lifelong involvement in PHE (Fraser-Thomas & Beaudoin, 2002; Taylor et al., 2009). All study participants demonstrated an understanding of the assessment methods utilized by a PHE teacher. They spoke to the assessment of learning skills and the challenges and successes associated with capturing these skills on a daily basis. They additionally discussed their use of formative assessments and summative assessments during PHE classes at the end of a unit. While study participants appeared to possess an understanding of the requirements to implement assessment practice methods, these PHE teachers were not following a standard format for adolescent girls. As described in the research, an in-depth and adequate understanding of appropriate assessment methods to reflect the curriculum expectations, while also maintaining motivation levels of students, was generally lacking across participants. This
lack could impact students’ feelings of competence (Fraser-Thomas & Beaudoin, 2002; Taylor et al., 2009).

Within the physical education context, perceptions of other students are quickly formulated and recognized by peers, which can contribute to negative self-perceptions and poor performance during assessments in PHE (Ntoumanis, 2005; Wang, Liu, & Biddle, 2003; Wang & Liu, 2007;). Participants of the study demonstrated an awareness of a certain ‘sensitivity’ associated with adolescent girls in PHE. They described the importance of highlighting achievements and successes in performance to increase levels of engagement. Their views were aligned with recommendations described in current research to be careful that assessment methods do not produce increased negative self-perceptions among girls and instead promote competence (Ntoumanis, 2005; Wang, Liu, & Biddle, 2003; Wang & Liu, 2007;).

**Motivation**

When students present lack of interest in PHE, or amotivation, a range of withdrawal behaviours can be observed (Ntoumanis et al., 2004; O’Donovan & Kirk, 2008; Olafson, 2002; Ryan & Deci, 2010; Whitehead & Biddle, 2008). On the other hand, when students possess intrinsic or extrinsic motivation, they present the greatest level of participation in PHE (Kilpatrick, Hebert, & Bartholomew, 2007; Ryan & Deci, 2010; Taylor et al., 2010).

Participants identified common withdrawal behaviours of girls in PHE, as consistent with the literature; these behaviours have been commonly identified in amotivated students. PHE teachers need to comprehend the reasons behind the exhibited responses to proactively address them (Ntoumanis et al., 2004; O’Donovan & Kirk, 2008;
Olafson, 2002; Ryan & Deci, 2010; Whitehead & Biddle, 2008). However, it is not apparent the extent to which study participants made connections among the exhibited behaviours, levels of amotivation, and ways to proactively address these behaviours.

Higher levels of motivation were present when girls asked to participate in certain units or activities, a variety of activities were presented in the class and choices were offered, and the girls received positive feedback and felt competent during an activity. Increased levels of motivation were aligned with a greater willingness to participate, increased movement levels, and a generally positive demeanour. Similarly, the literature identifies that intrinsic and extrinsic motivation in PHE leads participants to exhibit more positive adherence and participation in sport and exercise. As a consequence, PHE teachers should facilitate environments that support the achievement of students’ needs (Deci & Ryan, 2010; Kilpatrick, Hebert, & Bartholomew, 2007; Taylor et al., 2010). Despite this conclusion from research, participants may not have understood the importance of facilitating environments that foster intrinsic and extrinsic motivation.

**Cutting Across the Four Themes**

This section explores three crosscutting themes that were identified across participant responses that are influential on the motivational climate within the PHE context. First, the ways in which the three hypothesized basic psychological needs of Self-Determination Theory (autonomy, competence, and relatedness) were commonly applied by new PHE teachers are discussed. Then, the ways in which gender blindness influenced PHE teachers’ perceptions of students’ motivational behaviours in PHE are
investigated. Finally, the challenges faced by PHE teachers in addressing girls’ (and boys’) learning in PHE in a co-ed teaching setting are presented.

**Returning to Self-Determination Theory**

Self-Determination Theory states that three basic psychological needs—autonomy, competence, and relatedness—should be fostered to achieve higher levels of intrinsic motivation (Ryan & Deci, 2010). Intrinsic motivation helps maintain higher engagement and physical activity within the PHE context (Ryan & Deci, 2010). Within the PHE context, autonomy is achieved when individuals feel they possess choice over the activities in which they participate. Competence is achieved when individuals feel they are able to successfully complete the activity. Relatedness is achieved when individuals feel closely connected to other persons in the setting. Achieving all three basic psychological needs when teaching adolescent girls should increase the rate of participation and engagement in the class.

Participant responses demonstrated that competence was the psychological need with which PHE teachers were most regularly concerned when teaching adolescent girls. Specifically, PHE teachers ensured that students’ self-perceptions of sport ability were monitored during teaching and assessment practices, and that they facilitated environments that could positively improve negative self-perceptions. Monitoring feelings of competence was shown to improve adolescent girls’ levels of engagement and rate of participation in PHE.

In contrast, while PHE teachers demonstrated some understanding of the influence autonomy and relatedness can have on motivational behaviours of girls in PHE, they paid little attention to ensuring that appropriate autonomy-based and relatedness
strategies were utilized in their classrooms. PHE teachers did attempt to incorporate autonomy-related strategies through the selection of topics by teachers that they felt would be preferred by their student population. However, they generally did not take the next step to allow students choice in which activities to pursue. PHE teachers recognized that girls are strongly influenced by the social dynamic of the PHE class. Girls regularly utilized avoidance strategies such as the use of excuses, presentation of attitude, and increased rates of talking when amotivated. While PHE teachers made some effort to address feelings of relatedness and manage amotivated behaviours of their students, strategies were not incorporated regularly or deliberately and often were reactionary to behaviour, rather than proactive to promote greater relatedness.

The Influence of Gender

Participants in the study explained that they would not differentiate assessment practices (and, to a more limited extent, teaching practices) for boys and girls. The noted gender blindness of PHE teachers in assuming boys and girls should be assessed in the same fashion places challenges on students achieving appropriate social interactions and motivational achievement within the PHE environment. Research that has investigated racial colour blindness explains how judgments made about certain fixed characteristics, such as race, influence the perceived social behaviours of the population (Apfelbaum, Norton, & Sommers, 2012; Chao, Hong, & Chiu, 2013). Use of conceptualizations about human attributes as explored with racial colour blindness can also be applied to gender blindness, in that categorization of students based on gender could lead PHE teachers to believe that they should not take into consideration gender differences in their teaching and assessment practices (Apfelbaum et al., 2012; Chao, Hong, & Chiu, 2013). This
stance is problematic, in that understanding and acting upon such differences may be beneficial to students. While it may be well intentioned for PHE teachers to avoid the mention of differentiating assessment practices (and, to a more limited extent, teaching practices) by gender to not be perceived as biased, such gender blindness may, in fact, result in negative consequences, such as decreased levels of motivation and rate of participation in PHE (Apfelbaum et al., 2012).

Further, the PHE teachers in my study observed that male and female students held a gendered perspective of PHE, such that certain activities were classified as ‘feminine’ or ‘masculine’. Two participants, Christine and Finn, felt that gendered perspectives were shaped by the lack of females in professional sports. Girls and boys generally have different interests within the PHE environment, so these interests should be captured within the PHE environment to increase levels of motivation and rate of physical activity (Williams & Bedward, 2010). However, the inclusion of interests associated with girls or boys should be representative of the individual students within the class and not based on perceived gender bias (Adams, 2010; Lensky, 1990). Girls and boys within the PHE context should be open to trying different activities within PHE when motivational needs such as autonomy, competence, and relatedness are fostered, as opposed to participating or not participating based on previously formulated gendered perspectives. It is also important that PHE teachers do not impose any perceived gender bias they possess regarding girls’ or boys’ participation in certain PHE activities.

Finally, study participants commented on the interaction they felt their gender as teachers had on the motivational climate of their classrooms. Female participants on the whole thought that, because students perceived them to be young and fit, they generally
had mostly positive responses from their students. Christine, in particular, noted that, because she appeared very much a ‘girl’ with her hair and makeup done for PHE classes, the girls were interested to engage in activities they perceived to be more masculine (e.g., football). In contrast, two male participants (Steve and Finn) explained that they felt their gender negatively impacted girls’ behaviours in PHE as the girls would become giggly and uncomfortable around the male teachers, talking with their friends or texting or becoming incredibly withdrawn and embarrassed to participate. Little, if any, prior evidence exists regarding the influence PHE teachers’ gender has on motivational behaviours of adolescent girls and boys in PHE.

**Tension between Addressing Girls’ Needs and Teaching in a Co-ed Setting**

Adolescent girls are particularly sensitive to the multidimensional context of PHE and that teachers should implement certain teaching and assessment practices to meet their motivational needs (Gao et al., 2011; Gibbons, 2009; Hannon & Ratcliffe, 2006; Nicaise, Cogérino, Fairclough, Bois, & Davis, 2007; Ntoumanis, 2005; Olafson, 2002; O’Donovan & Kirk, 2008; Vu, Murrie, Gonzalez, & Jobe, 2006; Wang & Liu, 2007). In support of the literature, study participants consistently observed that girls have certain preferences in PHE that are different from those of boys. While current research and insights from study participants offer useful suggestions for addressing the needs of girls, these recommendations seem to assume that classes are single-sex. In many cases, PHE classes are of a co-ed design, and the nature of that class design can cause tension in addressing the psychological needs of both genders and can impact levels of engagement and rate of participation in PHE. To reconcile the perceived tensions, I first searched for literature to support co-ed class design. Having found none, I suggest exploring the
following possibilities for teaching practices, assessment practices, and motivational strategies through a focus on the psychological needs from Self-Determination Theory.

Tensions exist around the use of teaching strategies such as unit selection and structure of classes. As seen in the literature, selection of specific sport and fitness units in PHE strongly influences levels of motivation and rate of participation in PHE for girls and boys (Gao et al., 2011; Hannon & Ratcliffe, 2006). Gao et al. (2011) identified that girls preferred fitness-related activities and dance, whereas boys preferred sport topics. Additionally, Hannon and Ratcliffe (2006) explained that, in a flag football unit, despite efforts to increase levels of motivation of girls, they lacked an overarching interest in the unit topic. Supported by study participants, both male and female PHE teachers observed that girls demonstrated greater levels of engagement and rate of participation in lifestyle-focused activities such as fitness, dance, and yoga, whereas boys preferred sport topics. Further, as seen in the literature by Gibbons (2009), the structure of PHE courses for girls strongly impacts their level of engagement, such that PHE teachers should format classes to incorporate autonomy and development of skills, and facilitate a positive learning environment. Study participants observed that girls preferred class designs that included skill development and opportunity for social interactions, whereas boys preferred game play and competition and were reluctant to participate meaningfully in skill development.

Self-Determination Theory in general and the use of autonomy-related strategies in particular could address the teaching strategy tensions that exist. PHE teachers could format classes so that they are divided into timed sections, where students have the chance to rotate through structured activities that meet the needs of individual, often gender-influenced, preferences. Offering students choice would also eliminate gendered
stereotypes that PHE teachers might possess about the selection of sport topics and offer students the chance to participate in units they prefer and within a class design that best suits them.

Assessment practices contribute to tensions within the co-ed class design including delivery of feedback by PHE teachers and students’ self-perceptions of sport ability. As seen by Nicaise, Cogérino, Fairclough, Bois, and Davis (2007), while the frequency of feedback remained the same for both genders, girls received more feedback in the form of praise combined with technical instruction than did boys, whereas boys received more criticism, organizational feedback, and misbehaviour feedback. Study participants reflected on their use of feedback and felt that, while they tried to offer positive feedback to all students, they were particularly sensitive to the ways that girls interpreted feedback and the mode and tone of delivery. In contrast, boys were offered more direct feedback and were much more indifferent to feedback received. Additionally, teachers observed that girls were more sensitive to receiving feedback in front of their peers compared to boys.

Ntoumanis (2005) explained that student experiences in PHE impact their long-term involvement in physical activity and that it is important to foster feelings of positive self-perceptions for students. Wang and Liu (2007) described that girls typically possess negative self-perceptions in PHE. Similarly, study participants commented that more girls than boys struggled with their self-perception of sport ability in the social context of PHE and that they were more conscious of ensuring that girls feel good about themselves in class than they were with boys. Utilizing competence-related feedback methods could address the tensions associated with assessment practices in a co-ed class. Teachers could
implement a feedback delivery survey where students were offered the chance to select the type of feedback they would like to receive, and the method by which it would be received. Further, teachers could be mindful of ensuring that all students were involved in fostering positive perceptions of their peers within the class.

Girls and boys require different motivational strategies to maintain high rates of participation in sport and present different behaviours when they feel amotivated. According to Olafson (2002), girls present amotivated behaviour such as talking, skipping class, refusing to change clothes, and feeling sick. These amotivated behaviours serve as a reaction to the curriculum including a dislike for topics covered, intolerable peer relations in terms of popular students being associated with strong performances in PHE, the want or perceived need to impress boys by looking cute in class, and dominant cultural messages about femininity including the requirement to possess a specific body type. Further, as seen by O’Donovan and Kirk (2008), girls were particularly sensitive to being classified as an athlete or ‘jock’ as they felt it contradicted their ‘girly’ image and placed a large emphasis on their physical appearance. As seen by Vu, Murrie, Gonzalez, and Jobe (2006) in a co-ed class, boys presented amotivated behaviour such as misbehaviour, name calling, and aggression when they felt uncomfortable with the high levels of athleticism observed from certain girls and when girls restricted their own PHE behaviours with their fear of getting dirty or sweating, fear of breaking a nail or being embarrassed, or shyness about participation. Study participants observed similar amotivated behaviours from both girls and boys as presented in the literature.

To address tensions associated with motivational behaviours of girls and boys, PHE teachers should ensure they are fostering feelings of relatedness by addressing
student needs through teaching and assessment practices and proactively challenging gender stereotypes associated with athleticism. They might offer students the opportunity to be involved with designing the class and including topics that align with their interests. Further, they might want to explore assignments that have students research and examine professional athletes of both genders.

Therefore, by using the principles of SDT with respect to the three psychological needs, autonomy, relatedness, and competence, it may be possible to reduce tensions in PHE classes through gender differences in teaching practices, assessment practices, and motivation. Future research should explore and investigate further effectiveness of strategies for addressing levels of motivation within a co-ed PHE class.

**Limitations and Implications for Future Research**

The major limitations of this study can be divided into three categories: method, participants, and researcher. The methodology of my study may be a limitation, specifically with regards to data collection. During the qualitative interviews, the novice PHE teachers offered self-reports of their personal experience in sport, teaching practices, assessment practices, and motivation observed among their students. Self-reporting can result in bias. For example, participants may believe they are exhibiting a certain type of assessment practice, such as feedback, but students may interpret the participants’ assessment practices in a different way. Additionally, participants’ reports of feedback frequency may not be representative of actual behaviour. Further research could examine other sources of data, such as students and colleagues, to triangulate self-reports.
Observations of study participants during their teaching practice over an extended period of time would also enhance triangulation.

While there was an equal split of participant genders, four males and four females, the uniformity of participants may be a limitation to this study. All participants had a similar background regarding socioeconomic status, race, and age. They attended comparable professional socialization institutions of a similar nature. As such, perspectives offered by participants were informed by similar experiences and opportunities. While early career teachers in years 0-5 may be of similar age based on timelines for completion of educational qualifications, future research could examine a wider range of socioeconomic status, race, and institutions. Further, the recruitment of study participants was convenient, with participants recruited via a personal network of PHE teachers who fit the inclusion criteria. Future researchers may aim to collect participants more randomly, through formal recruiting efforts.

My personal experience as a PHE teacher for adolescent girls must be highlighted as a potential research bias. While I was careful to exclude personal opinions and practices, certain interpretations of results were made based on my comprehension of and experience with the PHE environment and behaviours of adolescent girls. A research team with varied experiences might be used in future studies on this topic.

**Implications for Practice**

Findings of my study offer three major implications for practice: development of a girl-specific PHE curriculum, population-specific (adolescent girls) pre-service teacher
training for PHE teachers, and new PHE teacher regulation in years 0-5 as a part of professional development.

This study supports the need for the development and implementation of a girl-specific PHE curriculum grounded by Self-Determination Theory (SDT) to increase girls’ levels of motivation in physical education (Ryan & Deci, 2010). Ensuring the fulfillment of girls’ psychological needs, such as autonomy, relatedness, and competence, strongly influences their levels of intrinsic motivation and thus increases their rate of participation in PHE (Ryan & Deci, 2010). Incorporating the specific likes of adolescent girls that foster intrinsic motivation aligned with teaching and assessment practices, and avoiding dislikes of adolescent girls that foster amotivated behaviour would lead to a positive learning environment for girls. Development of a girl-specific PHE would thus offer a checklist for all PHE teachers, to ensure that teaching pedagogy is aligned with the sensitivities of this population within the PHE environment. In single-sex classes, this girl-specific curriculum could shape the classroom, while, in co-ed classes, the girl-specific curriculum would need to be melded with considerations for boys, given the tensions noted between the two genders. Furthermore, PHE teachers should understand that meeting the needs of “typical girls” and “typical boys” does not reduce their responsibility for reaching all students in the classroom.

The study demonstrates the applicability for pre-service PHE teacher training on the needs of adolescent girls in PHE to ensure the findings of existing research are being applied in classrooms and to see that novice teachers understand the complex nature of the multidimensional context of PHE and the adolescent girl population. PHE teachers influence girls' level of motivation within PHE based on their personal experiences in
PHE, their teaching practices, their assessment practices, and their ability to address motivational behaviour of girls. PHE teachers rely mostly on their cumulative life experiences to influence their teaching (Capel et al., 2011; Chróinín & Coulter, 2012; Hand, 2013; Randall & Maeda, 2010), as they aim to replicate positive feelings of enjoyment that they experienced as students, instead of promoting a learning environment that fits the needs of all their students. They should enhance their cumulative life experiences by a stronger level of professional socialization.

Finally, this study is one of the few that offers insight into the practices of novice PHE teachers in years 0-5. Based on the inconsistencies observed in teaching practice across the interviewed participants, the study offers evidence to suggest that novice PHE teachers in years 0-5 should be regulated as a part of professional development to ensure they are positively impacting the adolescent girl population. Such monitoring would enhance organizational socialization.

**Final Reflections**

After one year of study as a full-time master’s student, I made the decision to transfer to part-time status and accept a full-time PHE teaching position, at an all girls private school in Toronto. While I was apprehensive in making the decision, as it would lengthen the time of completion (in hindsight, from two years to three), and remove me from a focused, academic environment, I felt I could not pass up the employment opportunity when it was so difficult to find consistent teaching work. On many occasions, when exhausted from a day of teaching and secluded in my workspace to attempt to write academically, I contemplated how I would ever get this thesis done, as incoherent
sentences appeared on my page. While writing this thesis under such circumstances was a challenge, it became an ideal situation in some ways, as I was able to apply my research to teaching practice. I was offered the chance to inspire girls to remain active in PHE and to find a piece of physical activity with which they would fall in love and continue for their entire life, which reflects the interest and passion that drove this entire research.

As a graduate student, my final assignment as a part of an independent study afforded me the opportunity to present my research proposal, literature review, and recommendations for teaching practices for adolescent girls to pre-service PHE teacher candidates at Queen’s. I have never given a presentation where I have then answered so many follow-up questions, which included, “Why are we only hearing this information at the end of our pre-service year?” and “What do you mean there is a certain way to teach girls compared to boys?” This presentation showcased for pre-service PHE candidates that there is an avenue for and interest in addressing the lack of dissemination of research to effect change in the classroom. I feel that my ongoing quest now is to address change and proactively find a way to influence pre-service teacher practice to impact more girls, to find these girls’ passion within the physical education classroom.
REFERENCES


July 15, 2014

Ms. Caitlin Tino
Master’s Student
Faculty of Education
Queen’s University
Duncan McArthur Hall
511 Union Street
Kingston, ON, K7M 5R7

GREB Romeo #: 6010577
Title: "GEDUC-689-13 Addressing the Needs of Adolescent Girls in Physical Education"

Dear Ms. Tino:

The General Research Ethics Board (GREB) has reviewed and approved your request for renewal of ethics clearance for the above-named study. This renewal is valid for one year from August 6, 2014. Prior to the next renewal date you will be sent a reminder memo and the link to ROMEO to renew for another year.

You are reminded of your obligation to advise the GREB of any adverse event(s) that occur during this one year period. An adverse event includes, but is not limited to, a complaint, a change or unexpected event that alters the level of risk for the researcher or participants or situation that requires a substantial change in approach to a participant(s). You are also advised that all adverse events must be reported to the GREB within 48 hours. Report to GREB through either ROMEO Event Report or Adverse Event Report Form at http://www.queensu.ca/ors/researchethics/GeneralREB/forms.html.

You are also reminded that all changes that might affect human participants must be cleared by the GREB. For example you must report changes in study procedures or implementation of new aspects into the study procedures. Your request for protocol changes will be forwarded to the appropriate GREB reviewers and/or the GREB Chair. Please report changes to GREB through either ROMEO Event Reports or the Ethics Change Form at http://www.queensu.ca/ors/researchethics/GeneralREB/forms.html.

On behalf of the General Research Ethics Board, I wish you continued success in your research.

Yours sincerely,

Joan Stevenson, Ph.D.
Chair
General Research Ethics Board

cc: Dr. John Freeman, Faculty Supervisor
    Dr. Don Klinger, Chair, Unit REB
    Ms. Stacey Boulton, c/o Graduate Studies and Bureau of Research
Email Recruitment Script:

To ______________(Name)

I would like to request your participation in my research study titled ‘Addressing the Needs of Adolescent Girls in Physical Education’. I received your email address via the professional network of Physical Education Teachers across Canada.

The aim of my project is to understand the teaching approaches of new secondary school teachers (years zero to five) for adolescent females in physical education classes including interpretation of curriculum guidelines, subject selection, assessment practices, class environment and the social dynamics within their classrooms.

Your participation in my study will involve a 45-60 minute interview that will be audio-recorded. More details pertaining to my study may be found in the provided Letter of Information. If you agree to participate in my study, I will follow up with you with a reminder email two days before the scheduled interview.

I appreciate your consideration.

Caitlin Tino

Master’s of Education Candidate

Queen’s University

8ct22@queensu.ca
APPENDIX C: LETTER OF INFORMATION AND CONSENT FORM

Letter of Information

Addressing the Needs of Adolescent Girls in Physical Education

This research is being conducted by Caitlin Tino, Master of Education candidate, under the supervision of Dr. John Freeman in the Faculty of Education, at Queen’s University in Kingston, Ontario. This study has been granted clearance according to the recommended principles of Canadian ethics guidelines and Queen’s policies.

What is this study about? The purpose of this research is to understand the teaching approach of new secondary school teachers (years zero to five) for adolescent females in physical education classes. The study will require one visit, where an interview of approximately 45-60 minutes will take place. Due to availability and accessibility of the participants recruited for the study (time restrictions due to teaching commitments and geographic locations across Canada), interviews will be conducted in person or via phone and will be audio-recorded. A follow up email will be sent for verification of transcript of the interview. There are no known physical, psychological, economic, or social risks associated with this study.

Is my participation voluntary? Yes. Please answer all interview questions as honestly as possible but you are not obliged to answer any material that you find objectionable or that makes you feel uncomfortable. You may withdraw at any time from the study with no repercussions. If you choose to withdraw from the study you may choose to have your data removed.

What will happen to my responses? Your responses will be kept confidential to the extent possible. Only experimenters will have access to this information. To help us ensure confidentiality, please refrain from using your name, and location of work in your responses. The data may be published in professional journals or presented at scientific conferences, but any such presentations will be of general findings and will never breach individual confidentiality. Should you be interested, you are entitled to a copy of the findings. As policy of Queen’s University, Faculty of Education’s policy, data will be retained for a minimum of five years and then destroyed.

Will I be compensated for my participation? There will be no compensation awarded for your participation.

What if I have concerns? Any questions about study participation may be directed to Caitlin Tino by email 8ct22@queensu.ca or by phone 416 300 4540. Any ethical concerns about the study may be directed to the Chair of the General Research Ethics Board at chair.GREB@queensu.ca or 613-533-6081.

Again, thank you. Your interest in participating in this research study is greatly appreciated.
Consent Form

Addressing the Needs of Adolescent Girls in Physical Education

Name (please print clearly): _______________________________________

1. I have read and understand the Letter of Information and have had any questions answered to my satisfaction.

2. I understand that I will be participating in the study called Addressing the Needs of Adolescent Girls in Physical Education. The purpose of the study is to understand the teaching approaches of new secondary school teachers (years zero to five) for adolescent females in physical education classes. I understand that this means that I will be asked to participate in 45-60 minute interview that will be recorded via audio device.

3. I understand that my participation in this study is voluntary and I may withdraw at any time. I understand that every effort will be made to maintain the confidentiality of the data now and in the future. Only experimenters in the Faculty of Education Laboratory will have access to this area. The data may also be published in professional journals or presented at scientific conferences, but any such presentations will be of general findings and will never breach individual confidentiality. As policy of Queen’s University, Faculty of Education’s policy, data will be retained for a minimum of five years and then destroyed.

4. I am aware that if I have any questions, concerns, or complaints, I may contact Caitlin Tino 8ct22@queensu.ca; Dr. John Freeman at jfreeman@queensu.ca; or the Chair of the General Research Ethics Board (533-6081) at Queen’s University.

I have read the above statements and freely consent to participate in this research:

Signature: _________________________________ Date: ____________________________

Please sign one copy of Consent Form and return to Caitlin Tino. Retain the second copy for your records.

Should you be interested, you are entitled to a copy of the findings. Please provide your email address below.
Email address: ________________________________________.
APPENDIX D: RESEARCH QUESTIONS AND INTERVIEW QUESTIONS

RQ 1: How do these PHE teachers’ backgrounds in sport and physical education impact their teaching philosophy, particularly with respect to adolescent females?
   - What has your experience in sport and physical education been like?
   - To what extent has this experience influenced your teaching practices?
   - What is your teaching philosophy on adolescent girls' participation in physical education?

RQ 2: What teaching practices do these PHE teachers use, particularly with respect to adolescent females?
   - What physical education units do you incorporate in your class throughout the year? What special offerings are there?
   - How would you instruct a sport unit to a class of adolescent girls? Describe how this unit is designed differently for girls than for boys.

RQ3: What assessment practices do these PHE teachers use, particularly with respect to adolescent females?
   - What type of assessment practices do you utilize in your physical education classroom? To what extent is assessment differentiated by gender?
   - What type of feedback do you offer during a physical education class or unit? To what extent is feedback differentiated by gender?
RQ 4: What challenges do these PHE teachers experience when teaching adolescents to keep the students engaged and motivated?

- What do you find to be the most challenging aspect in keeping girls engaged in PHE?
- What do you find to be the most challenging aspect in keeping boys engaged in PHE?
- What negative behaviours have you observed in your class that are more prevalent among females than males?
- What negative behaviours have you observed in your class that are more prevalent among males than females?
- To what do you attribute this negativity?
- What strategies have worked in motivating adolescent girls in your class?
- How do these strategies seem to increase/maintain levels of motivation?
- What strategies have been less successful when working with adolescent girls?
- How do these strategies seem to decrease levels of motivation?