

A Qualitative Exploration of Adolescent Girls' Experiences with Relatedness-Supportive
Teaching Strategies in Physical Education

By

Teresa Hartrick
BSc, University of Victoria, 2013

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Abstract

School-based physical education (PE) has been identified as an effective avenue for addressing issues of inactivity among adolescent girls. However, often times PE courses fail to meet the needs of young women and instead lead to disaffection; ultimately resulting in the majority of adolescent girls dropping out of PE once it is no longer mandatory. Self-Determination Theory (SDT) has proven to be a useful framework for understanding PE motivation among this population. In particular, supporting the need for relatedness among female PE students appears significant for enhancing PE motivation and engagement. Therefore, providing relatedness-supportive learning environments may be an effective way for teachers to encourage continued PE and PA participation among their female students. The purpose of this research study was to gain insight into the experiences of grade 9 and 10 girls participating in a girls-only PE course that employed relatedness-supportive teaching strategies. The goal was to use a case study approach with semi-structured (teacher) and focus group interviews (students) to explore the role of relatedness-supportive learning environments in enhancing PE motivation and enjoyment among adolescent girls, as well as their overall feelings of social relatedness. Findings highlighted the importance of (a) meeting students where they are at, (b) creating open, respectful and active environments, (c) providing opportunities for organic connection-making, and (c) the role of resource and curriculum constraints.

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Chapter 1: Introduction

Physical Activity (PA) is essential to the health and wellbeing of individuals across the lifespan. Research has shown that engaging in regular PA is associated with numerous physical (e.g. prevention of chronic diseases such as diabetes, cardiovascular disease and diabetes), psychological (e.g. decreased rates of depression and anxiety and higher levels of self-esteem and life satisfaction) and social (e.g. improved social interaction) health outcomes (Brooks, Smeeton, Chester, Spencer, & Klemra, 2014; Eime, Young, Harvey, Charity, & Payne, 2013; Warburton, Nicol, & Bredin, 2006). Yet despite the widely known benefits of PA engagement, a vast majority of the Canadian population does not meet the recommended Canadian physical activity guidelines; this is especially true when looking at children and adolescents (Statistics Canada, 2015a; Statistics Canada, 2015b). According to the 2012 and 2013 Canadian Health Measures Survey, only 9% of Canadian youth aged 5 to 17 years acquired the recommended 60 minutes of moderate-to-vigorous-intensity (MVPA) physical activity they needed each day (Statistics Canada, 2015a). Furthermore, when we look at gender differences within PA participation, statistics show that only 6% of Canadian girls aged 5 to 17 years are meeting guidelines; as compared to 13% of boys (Statistics Canada, 2015a). These participation rates were worse as girls entered into adolescence, with only 3% of adolescent girls aged 12 to 17 years acquiring 60 minutes of MVPA daily (Statistics Canada, 2015a). The above PA trends were evident across the lifespan, with PA rates lower with each age group transition and females consistently engaging in less PA than males.

The significant decline in PA engagement among adolescent girls is a troubling public health concern. Research has shown that early PA habits are one of the strongest predictors of continued and future PA engagement (Hearst, Patnode, Sirard, Farbaksh, & Lytle, 2012).

Therefore, if girls are not active during adolescence, it is unlikely they will become more active as they age – leaving them more susceptible to chronic health problems in the future.

Furthermore, the short- and long-term psychological and social benefits of PA may be especially salient for adolescent girls, who report higher instances of depression, extreme stress or despair, and anxiety, and lower levels of self-esteem and body satisfaction, than their male counterparts (Public Health Agency of Canada, 2011; Smith, Stewart, Poon, Peled, Saewyc, & McCreary Centre Society, 2014). Given these facts, creating interventions targeted at enhancing adolescent girls' PA enjoyment and motivation is warranted.

School-based physical education (PE) programs have been deemed a particularly effective avenue through which to address issues of physical inactivity among adolescent girls. Due to PE's wide availability, its structured context, and its overall aim of fostering lifelong PA habits, many researchers have taken to examining how PE environments can better support the PA needs and motivations of female students (Azzarito, Solmon, & Harrison, 2006; Brooks & Magnusson, 2006; Felton et al., 2005; Gibbons & Gaul, 2004; Gruno & Gibbons, 2016; Jamner et al., 2004; Ketteridge & Boshoff, 2008; Pate et al., 2005; Pfaeffli & Gibbons, 2010). This is especially true of required PE courses, as these programs reach girls that might not otherwise participate in leisure-time or recreational PA due to a lack of motivation or an inability to attend. Yet despite the intended objectives of PE curriculums - such as the British Columbia (B.C.) PE curriculum, which aims to provide students with the “knowledge, skills, and understandings to be safe, active, and healthy citizens throughout their lives” (British Columbia Ministry of Education, 2016a, para. 1) - research has shown that often times PE courses fail to meet these aims and instead lead to disengagement and disaffection among girls (Gibbons & Humbert,

2008; van Daalen, 2005). As a result, the majority of adolescent girls drop out of school-based PE programs once they are no longer mandatory (Gibbons & Gaul, 2004).

In order to facilitate continued participation in PE and foster meaningful PA experiences among young women, researchers have aimed to understand the cause of this aforementioned disaffection. What this research has shown is that most adolescent girls do not identify with the competitive, sport-focused, skill-based environments that PE classes often reflect. Instead, these environments leave many young girls feeling intimidated, incompetent, and self-conscious (Davison, Schmalz, & Downs, 2010; Mitchell, Inchley, Fleming, & Currie, 2015; Olafson, 2002; Van Daalen, 2005). Themes related to a lack of competence, confidence and motivation have emerged consistently across the PE disaffection research, but they often have not directly addressed the question: *‘What would make PE more meaningful to young women?’*

More recently, researchers have turned their attention to asking girls what they want out of their PE experiences and to examining promising practices that currently exist within the PE realm to encourage sustained enrollment. What this research has shown is that young women valued having choice in course development, feeling capable of meeting course expectations, and being involved in a positive and supportive social environment (Wang & Liu, 2007; Gibbons, 2009; Gibbons, Temple, & Humbert, 2010; Gibbons, Wharf Higgins, Gaul, & Van Gyn, 1999; Gruno & Gibbons, 2016). As well, the desire for a focus on lifetime activities as opposed to team sport activities was consistently expressed. Promising PE practices that account for these components have demonstrated that by meeting the needs and interests of girls in PE, educators can motivate the continued engagement, and even future enrolment, of young women in PE courses. (Dudley, Okely, Pearson, & Peat, 2010; Fairclough & Stratton, 2005; Gibbons, 2009;

Gibbons, Gaul, & Blackstock, 2004; Jamner, Spruijt-Metz, Bassin, & Cooper, 2004; Neumark-Sztainer, Story, Hannan, & Rex, 2003a; Pate et al., 2005; Pfaeffli & Gibbons, 2010).

The tenets that girls have identified as being important to their PE motivation and enjoyment are well aligned with the constructs of Self-Determination Theory (SDT) (Deci & Ryan, 1985). As such, SDT has proven to be a useful framework for understanding PE motivation among adolescent girls and for creating interventions to enhance PE participation. SDT is a macro-theory of human motivation, development and wellness concerned with supporting the optimal functioning and growth of humans (Deci & Ryan, 2008). While many theories of motivation primarily focus on the overall amount of motivation for predicting performance and well-being outcomes, SDT instead differentiates between types of motivation. That is, SDT postulates that “the type or quality of a person’s motivation [is] more important than the total amount of motivation” (Deci & Ryan, 2008). The first tenet of SDT is this differentiation of motivation types.

Within SDT exist three distinct categories of motivation: intrinsic motivation, extrinsic motivation and amotivation, with intrinsic motivation identified as the most autonomous and desired form of motivation (Deci & Ryan 1985). According to SDT, motivational regulations that are more autonomous lead to greater functioning and well-being than those considered more controlling (Deci & Ryan, 2008; Ryan & Deci, 2000). The type of motivation an individual experiences in a given situation is largely dependent on the fulfillment of three basic psychological needs: autonomy, competence, and relatedness. The importance of these three psychological needs is the second tenet of SDT.

SDT suggests that there is “a set of universal psychological needs [autonomy; competence; relatedness] that must be satisfied for effective functioning and psychological

health” (Deci & Ryan, 2008, p.183). The need for autonomy refers to an individual’s sense of choice and control, the need for competence involves feeling a sense of self-efficacy and capacity to perform the task at hand, and the need for relatedness involves feeling a sense of social connection and belonging (Deci & Ryan, 2008). The satisfaction of these needs facilitates an individual’s autonomous motivation, psychological growth, and well-being. However, if these needs are thwarted than amotivation and maladaptive behaviours can occur. Furthermore, the satisfaction of these needs is dependent on various social forces and interpersonal environments (Deci & Ryan, 2008). Linking this theory to adolescent girls’ PE experiences, it is theorized that the more supportive the PE environment is of a student’s basic psychological needs, the more motivated and engaged the student will be.

While research to date has found evidence in support of the use of a SDT framework for creating adapted, girls-only PE programs that support the psychological needs of young women, much of this research has focused on the importance of autonomy and competence (Ntoumanis, 2005; Stormoen & Urke, 2016; Standage et al., 2005; Van den Berghe et al., 2012). However, studies examining the importance of need satisfaction for PA and PE motivation among adolescent populations have found that supporting the need for relatedness appears especially significant for young women (Cox & Williams, 2008; Cox et al., 2009; Ruiz, Graupera, Moreno & Rico, 2010). While researchers have recently begun exploring the importance of relatedness-supportive teaching behaviours in PE environments, and how teachers can improve relatedness-support in their classrooms, this research is limited and has not yet addressed the specific needs of female students (Sparks, Dimmock, Whipp, Lonsdale, & Jackson, 2015; Sparks, Lonsdale, Dimmock, & Jackson, 2017). More research into how teachers and educators can create relatedness-supportive learning environments within girls-only PE courses is warranted. It may

be that the known psychological benefits of positive social connections gained through relatedness activities within PE could have an even greater impact on the mental and physical wellbeing of young women than PA participation alone (Ullrich-French, McDonough, & Smith, 2012).

Purpose Statement

It is evident that in order for adolescent girls to remain engaged in school-based physical education courses they must feel competent, confident, and motivated. Likewise, research has shown that girls value social relationships during adolescence, and that experiencing positive social connections could both enhance PE engagement, and have lasting benefits on the emotional, social, and psychological development of young women. Therefore, providing relatedness-supportive learning environments may be an effective way for teachers to support the physical, social, and psychological wellbeing of young women and encourage continued PE and PA participation beyond the mandatory curriculum. The purpose of this research study was to gain insight into the experiences of grade 9 and 10 girls participating in a girls-only PE course that employed relatedness-supportive teaching strategies. The goal was to understand the role of relatedness-supportive learning environments in enhancing PE and PA motivation and enjoyment among adolescent girls, as well as their overall feelings of social relatedness.

Research Questions

Four research questions were addressed in this study:

1. How did the use of relatedness-supportive teaching strategies affect the female students' perceptions of the learning environment and their motivation to engage in the course content?

2. How did the use of relatedness-supportive teaching strategies affect the female students' decision to continue with future elective PE and/or PA engagement in general?
3. How did the use of relatedness-supportive teaching strategies affect the female students' overall sense of school-community and social-connection?
4. How did the teacher's perceptions of the effectiveness of the relatedness-supportive teaching strategies compare to those of the students?

Assumptions

1. The participants responded truthfully during the focus group interviews.
2. The participants were able to authentically recall their PE experiences.
3. The participants were able to verbally express and reflect on their personal experiences.
4. The researcher's past experiences became part of the research process.

Limitations

1. Small sample size limits the transferability of the results.
2. A more dominant member of the focus group may have influenced the quality of the responses.
3. The researcher may have biased the results or influenced the interpretation of the responses.

Delimitations

1. The study was limited to 1 focus group consisting of 12 female participants.
2. The study was limited to the grade 9 and 10 female participants of one physical education class in one school.

Operational Definitions

Adolescence: Adolescence is the transitional period between puberty and adulthood that is characterized by many physiological, cognitive, psychosocial, and sexual changes. This study focuses on middle adolescence (14-16 years).

Grade 9/10 Physical Education: A mandatory school subject, delivered five days per week for 60 to 80 minutes per day, which allows students to acquire the knowledge, skills and attitudes to enhance their quality of life through active living.

Learning environment: the class setting comprising four factors: the physical setting; relationships (teacher-student and student-student); structures and expectations; and language and communication.

Relatedness: refers to feeling connected to others, to caring for and being cared for by those others, to having a sense of belongingness both with other individuals and with one's community

Relatedness-supportive: refers to the social environments in which individuals have the opportunity to develop healthy relationships with others.

Relatedness-supportive teaching strategy: refer to specific strategies for instruction and assessment, and guidelines for curriculum content that educators can use to create more relatedness-supportive PE environments.

Chapter 2: Review of Literature

According to the British Columbia Ministry of Education, the primary aim of Physical Education (PE) is to “enable all students to develop knowledge, movement skills, and positive attitudes and behaviours that contribute to a healthy, active lifestyle.” (British Columbia Ministry of Education, 2008, p.11). Because of this overarching goal, PE programs are often viewed as an ideal environment within which to foster healthy lifestyle choices and lifelong PA engagement. As well, PE has the potential to support the development of PA habits among children and youth of all backgrounds and demographics as it is widely available, generally free-of-cost, and often a mandatory requirement up until grade 10 (Gruno & Gibbons, 2016). However, the unfortunate reality of school-based PE is that many youth, and in particular young girls, view PE as an unpleasant, sometimes distressing or even traumatizing experience, forced upon them by the education system (van Daalen, 2005). These troublesome views are evident in the obvious disinterest among students in mandatory PE courses and the low rates of PE retention once enrolment becomes optional (Gruno & Gibbons, 2016). In an attempt to re-engage young girls in PE, and ultimately promote continued and future PA participation among this population, researchers have sought to understand the components of the PE environment that are causing this disaffection.

Why do Girls Disengage from PE?

Over a decade’s worth of research has identified a number of factors contributing to adolescent girls’ dislike of school-based PE. A study exploring resistance to schooling found that resistance to PE in particular emerged as a common theme among adolescent girls (Olafson, 2002). Results suggested that this resistance to PE stemmed from institutional sources, including the PE curriculum, social and cultural sources, including having to navigate gender discourses

within the PE environment (which often favours traditional masculine gender roles) and body image concerns (Olafson, 2002). Building on these early findings, Van Daalen's study exploring girls' experiences in PE identified seven common themes for not enrolling in elective PE (2005). These seven themes related to negative emotions associated with PE, social concerns in the PE environment, and gender discourse and sexism; of these themes, the three that most commonly result in negative PE experiences were found to be competition, evaluation, and degradation (Van Daalen, 2005).

More recent research has continued to support these initial findings. In 2010, Davison and colleagues explored adolescent girls' disinclination for physical activity in a two-year longitudinal study (Davison, Schmalz, & Downs, 2010). Results found that among adolescent girls, the reasons for disliking physical activity include low perceived competence, lack of opportunities, high perceived exertion, concern about physical appearance, and threats to girls' gender identity; with low perceived competence being the most commonly reported reasons for disinclination (Davison et al., 2010). In a similar study, Mitchell and colleagues interviewed one disengaged female student from four different schools to better understand their experiences in PE (Mitchell, Inchley, Fleming, & Currie, 2015). Findings from these interviews revealed that while the type of activities offered in PE classes is important, perceptions of competence and the social environment within which PE occurs had a greater impact on PE motivation and engagement (Mitchell et al., 2015). While this is only a snapshot of the substantive amount of research that has explored PE disaffection among girls, the findings have been consistent across: PE environments that are competitive and skill-based, that put a strong emphasis on evaluation, and that favour traditionally masculine roles, leave adolescent girls feeling incompetent, self-conscious and insecure.

What do Girls want from their PE Experience?

Building on these findings around PE disaffection, research into what girls want from their PE experiences has provided a broader understanding of how PE programs and educators can meet the needs of their female students. These studies have found that, among other things, adolescent girls want to feel as though they have a choice in course content, as though they are able to achieve the expectations and requirements of the course, and as though they are a part of a supportive and positive social environment (Azzarito, Solmon, & Harrison, 2006; Brooks & Magnusson, 2006; Felton et al., 2005; Gibbons & Humbert, 2008; Gibbons, 2009; Ketteridge & Boshoff, 2008).

Support for components of meaningful PE experiences among high school girls is no more evident than in the work done by Gibbons and colleagues. In 2008, Gibbons and Humbert used focus group interviews, individual interviews, and questionnaires to gain insight into the experiences of middle-school girls enrolled in co-educational PE classes. Out of the data emerged four key themes that contribute to a meaningful PE experience, including: having a variety of activities to choose from and input into course decision making processes; perceptions of competence and a sense of efficacy in skill performance; the understanding of the importance of being physically active for overall health; and a sense of gender equity within the class environment (Gibbons & Humbert, 2008).

Building on the above findings, Gibbons conducted an investigation into the features of 32 senior level PE courses that had successfully maintained high enrolment of female students (Gibbons, 2009). The aim of this study was to identify the features that were common between the programs, to understand the successes and challenges of implementing these programs, and to gain insight into why female students chose to participate in these programs (Gibbons, 2009).

Similar to Gibbons and Humbert's (2008) study, a handful of themes emerged as contributing factors to female student enrolment. These themes were: a focus on lifetime PA; value-added options, meaning that participants received some sort of additional value or credit for completing the course; student involvement in course development; gender as a course design feature; authentic assessment and an evaluation process that emphasized personal goals over skill; and finally, the importance of a positive and respectful class environment (Gibbons, 2009).

Through the work of Gibbons and many others who have found concurrent themes in their own research (Azzarito, Solmon, & Harrison, 2006; Brooks & Magnusson, 2006; Felton et al., 2005; Ketteridge & Boshoff, 2008), experts have been able to develop PE programs specifically tailored to meet the needs of young female students. These tailored PE programs have demonstrated relative success through the use of single-gender classes, the ability to provide a fun and welcoming learning environment which incorporates variety, choice and cooperation into course content, and the ability to foster feelings of confidence, social safety and competence among students (Gibbons & Gaul, 2004; Gruno & Gibbons, 2016; Jamner et al., 2004; Pate et al., 2005; Pfaeffli & Gibbons, 2010). As the key components of these successful tailored PE programs align closely with the tenets of Self-Determination Theory, SDT has been a widely used framework within this research domain.

Self-Determination Theory

Self-Determination Theory is a theory of human motivation, development and wellness first developed by Edward Deci and Richard Ryan in the mid-1980s (Deci & Ryan, 1985). Concerned with supporting optimal functioning and growth, SDT has been applied to issues within a wide range of life domains including work environments, health care, education, and sport and PA (Deci & Ryan, 2008). Unlike other theories of motivation that focus on the overall

amount of motivation for predicting performance and behaviour, SDT instead differentiates between types of motivation. That is, SDT postulates that “the type or quality of a person’s motivation [is] more important than the total amount of motivation” (Deci & Ryan, 2008).

Within this theory exist three distinct categories of motivation: intrinsic motivation, extrinsic motivation and amotivation (Deci & Ryan 1985). According to Ryan and Deci (2000), intrinsic motivation refers to “doing something because it is inherently interesting or enjoyable” (p.55), whereas extrinsic motivation refers to “doing something because it leads to a separable outcome” (p.55); and amotivation is the state of lacking an intention to act. While intrinsic motivation is considered to be the most autonomous and self-determined form of motivation, extrinsic motivation may be either autonomous or controlled depending on the context in which it occurs (Deci & Ryan, 2008). According to SDT, motivational regulations that are more autonomous lead to greater functioning and well-being than those considered more controlling (Deci & Ryan, 1991, 2008; Ryan & Deci, 2000).

The second key tenet of SDT is the idea that there is “a set of universal psychological needs that must be satisfied for effective functioning and psychological health” (Deci & Ryan, 2008, p. 183). The three basic psychological needs identified by SDT are: the needs for competence, autonomy, and relatedness (Deci & Ryan, 1985, 1991, 2008). Each of these needs is viewed as playing an important role in the development of motivation. The need for competence refers to an individual’s perceptions of ability and self-efficacy; the need for autonomy refers to an individual’s perceptions of choice and control within a situation or environment; and the need for relatedness, refers to feeling connected to others, to caring for and being cared for by those others, and to having a sense of belongingness both with other individuals and with one’s

community (Deci & Ryan, 2008). The satisfaction of these needs facilitates an individual's autonomous motivation, psychological growth and well-being.

While not all needs are necessary for the development of autonomous forms of motivation, it is generally postulated that the satisfaction of all three needs must be met to experience true intrinsic motivation. Furthermore, the satisfaction of these needs is dependent on various social forces and interpersonal environments and if the development of these psychological needs is thwarted, controlled- or a-motivation and maladaptive behaviours can occur (Deci & Ryan, 1985, 1991, 2008).

Psychological Need Satisfaction & PE Motivation

Empirical studies that have applied a SDT framework to understanding PE participation have demonstrated the importance of psychological needs satisfaction for enhancing PE motivation and enjoyment among youth. A critical review by Van den Berghe, et al. (2012) found that many studies in the area of PE have supported the motivational sequence supported by SDT; and that when physical education teachers are able to support their students' needs for competence and autonomy, positive outcomes are observed. Similarly, Standage, Duda, and Ntoumanis (2005) found that satisfaction of all three psychological needs within the PE environment was predictive of intrinsic motivation among students; and in turn, positive PE-related outcomes were observed among male and female students. While this research supports the premise that satisfaction of each of the three basic psychological needs is important for optimal PE motivation, research has demonstrated the level of importance of the individual needs on motivation quality differs between boys and girls.

Overall support for the need for competence has been strong across female and male participants. In their study on predictors of intrinsic motivation among adolescent PE students,

Ferrer-Caja & Weiss (2000) found that, along with task-goal orientation and learning climate, perceived competence was the strongest predictor of intrinsic motivation and effort for both female and male students. Likewise, Ntoumanis (2005), Stormoen & Urke (2016), and Standage et al. (2005), all found support for the importance of competence-supportive environments on PE motivation among adolescent populations.

Findings around the importance of autonomy for PE motivation have been less consistent. Some researchers have found that the need for autonomy does not appear to be a significant predictor of enjoyment and motivation for either girls or boys within the PE setting (Stormoen & Urke, 2016). Additionally, a study examining the motivational differences between students in a choice-based PE program and students in a non-choice-based PE program found that choice was actually detrimental to motivation; with both female and male students in the non-choice programs reporting higher levels of motivation than those in the choice-based programs (Zach & Yanovich, 2015). However, other researchers have found that providing choice-based PE programs and supporting the autonomy of students has been positively associated with more autonomous forms of PE motivation, higher identified regulation, less external control, and decreased levels of amotivation among adolescent girls (Prusak et al., 2004; Ling & Wang, 2009).

Finally, with much of the research on need satisfaction focusing on the needs for competence and autonomy, the role of relatedness on PE motivation is less understood. However, the research that does exist appears to support the importance of perceptions of relatedness-support within the PE environment. One study examining the role of perceived teacher support, motivational climate, and psychological need satisfaction on PE motivation among youth, found that perceived teacher support and relatedness were stronger predictors of

self-determined motivation than perceptions of competence (Cox & Williams, 2008). In fact, the authors suggest that “to the extent that students are not inherently attracted to activities in physical education, perceived relatedness may hold greater importance for the development of self-determined motivation” (Cox & Williams, 2008, p. 511). In a similar study exploring the role of peers and teachers as sources of relatedness perceptions, motivation, and affective responses in PE, Cox and colleagues, found that students’ perceptions of support and acceptance among their teachers and peers positively contributed to feelings of self-determination during PE (Cox et al., 2009). More recently, a qualitative exploration of students’ experiences of autonomy, competence and relatedness in a school-based physical activity intervention in the Netherlands found that relatedness was crucial to students’ perceptions of wellbeing in school (Holt, Smedegaard, Pawlowski, Skovgaard, & Christiansen, 2018). Furthermore, having a sense of relatedness appeared to be essential to students’ perceptions of autonomy and competence in the learning environment (Holt et al., 2018). Altogether, the above findings suggest that if PE programs and physical educators are able to support the basic psychological needs of students within the physical education environment, positive behavioural and motivational outcomes will likely result.

The Role of Relatedness

Of the three basic psychological needs outlined by SDT, satisfaction of the need for relatedness appears to be of particular significance for adolescent girls’; especially in the context of the PE environment. In a study exploring motivational factors and predicted participation in optional PE, it was found that while need satisfaction of competence and autonomy were not significantly different between boys and girls, the female students did report significantly greater levels of relatedness satisfaction (Ntoumanis, 2005). Likewise, a study exploring factors that

promote positive experiences and flow in school-based PE found that the need for relatedness was the strongest predictor of flow among adolescent girls, while the need for competence was the most significant predictor among boys (Stormoen & Urke, 2016).

Studies exploring learning environments and social preferences between male and female students have further supported these results. Ruiz and colleagues found that male and female students preferred to learn within different social contexts, with boys preferring competitive environments that support individual achievement, and girls valuing cooperative environments that support connection and relationship building (Ruiz, Graupera, Moreno & Rico, 2010). Similarly, Hills (2007) found that girls place more importance on social relationships in PE and are more consciously inclusive than their male counterparts. As well, Shen and colleagues found that female student's' perceptions of relatedness and belonging with their teachers and peers plays an important role in PE motivation and engagement (Shen et al., 2012). These findings were further supported by Levenson and colleagues, who reported that regardless of the activity, female students were more conscious of their social needs than their male counterparts and put more emphasis on the importance of social relations (Levenson, Danielsen, Wold, & Samdal, 2012).

Not only do relatedness-supportive learning environments appear to enhance PE motivation and enjoyment, but research has also supported the role of perceived relatedness on psychological outcomes among adolescent girls. Hills (2007) found that friendships and positive social relationships within the PE environment appeared to protect girls against the negative emotional impact that PE experiences can have by providing a source of enjoyment and support; thereby reducing the marginalization that some girls may face (Hills, 2007). Furthermore, Ullrich-French and colleagues (2012) found that among a group of low-income youth

participating in a sport-based positive youth development program, changes in perceived social connection were positively associated with changes in psychological outcomes (Ullrich-French et al., 2012).

Though research into the role of relatedness within the PE environment is relatively limited, what does exist provides support for the importance of providing relatedness-supportive learning environments to enhance PE motivation among adolescent girls. However, what is less understood is how physical educators can support the need for relatedness among their female students, and whether strategies that teachers have been employing are having the desired effect (Gibbons, 2014).

Recent research has begun to explore teacher behaviours and interventions that are conducive to creating relatedness-supportive environments within PE (Sparks, et al., 2015; Sparks, et al., 2017). A qualitative study with grade 8 and 9 students in Perth, Australia aimed to determine what students perceived as relatedness-supportive behaviours among their PE teachers (Sparks et al., 2015). Three distinct categories of relatedness-supportive teacher behaviours emerged from the data, including: (a) teacher communication, such as individualized conversations, teacher enthusiasm, and friendly communication; (b) in-class social support, including task-related support and promoting cooperation and teamwork; and (c) teacher attentiveness, which encompassed awareness of student abilities and class events, and caring behaviours (Sparks et al., 2015). Furthermore, the researchers found that when students perceived their PE teacher's behaviours to be relatedness-supportive, a number of positive outcomes were experienced. These outcomes included more positive affective responses and mood states, enhanced engagement in class material, increased intrinsic motivation, improved self-efficacy beliefs, and an increased interest in leisure-time PA (Sparks et al., 2015).

Building on the above research, Sparks and colleagues conducted an intervention study to improve relatedness-supportive instructional practices among high school PE teachers. Results showed that when teachers participated in a professional development program aimed at improving relatedness-supportive instructional behaviours, their students reported higher levels of perceived relatedness-support and overall PE enjoyment (Sparks et al., 2017). While this research provides more evidence for the importance of relatedness-support in high school PE, as well as insight into improving relatedness-supportive teaching behaviours among PE teachers, it does not touch on the specific needs of female students in the PE environment. This need for a better understanding of high school girls' perceptions of and experiences with relatedness-supportive teaching strategies is what led to the purpose of this study.

Chapter 3: Methods

The purpose of this research was to explore adolescent girls' experiences with relatedness-supportive teaching strategies in the Physical Education environment. This chapter outlines the methodology that was used to address the research questions at hand. A description of the study design, the participants and recruitment methods, and data collection and analysis processes are provided; as well as a brief discussion of my background as it pertains to the research.

Design

This research employed a case study design. A case study design is defined as “an empirical inquiry that investigates a contemporary phenomenon within its real-life context” (Yin, 2003, p.23). This type of research focuses on the perspectives of participants and is conducted in a setting that is natural to the participants (Yin, 2003). A case study design was selected because the purpose of this study was to glean deeper understanding into the perspectives and experiences of adolescent girls in a specific physical education setting. Using this method, a specific case was selected based on its appropriateness for the purpose of the research. A focus group interview and semi-structured interview were used to collect data, and framework analysis and constant comparison were used to code and theme the findings (Boeije, 2002; Gale, Heath, Cameron, Rashid, & Redwood, 2013).

Case Description

The case in this study was one mandatory, girls-only, PE class for grade nine and ten students at a high school in the Southern Vancouver Island region of British Columbia. The class was selected based primarily on the teacher's ongoing participation in a related study entitled *Relatedness-Supportive Learning Strategies for Girls in Physical Education* and served as a pilot

for further research into student experiences with these strategies. As part of her involvement in this other research study, the teacher had been consciously incorporating and recording the use of, relatedness-supportive teaching strategies in her PE classes.

The school. The school in this study was a secondary school located in the South Vancouver Island region of British Columbia. For the 2016-17 academic year, ~1,000 students in grades 9 through 12 were enrolled at the school. The school runs on a semester system and the study took place during the winter semester running from February to June.

The course. The course in this study was a grade 9/10, girls-only PE class. PE is a mandatory requirement for all grade nine and ten students as part of the B.C. school curriculum. The high school in this study made the decision to offer gendered PE courses at this level. The PE courses were mixed grade and an effort was made to ensure an equal distribution of grade nine and ten students in each class. The course content was guided by the learning outcomes outlined in the B.C. PE curriculum (British Columbia Ministry of Education, 2008). The course was held five days a week and was scheduled during the last class block of the day. The PE course was unique in that the teacher was making a conscious effort to incorporate relatedness-supportive teach strategies into daily lesson plans as part of her involvement in a related research study entitled: *Relatedness-Supportive Learning Strategies for Girls in Physical Education*.

Relatedness-supportive learning strategies program. *Relatedness-Supportive Learning Strategies for Girls in Physical Education* is a research program being conducted by Dr. Sandra Gibbons at the University of Victoria. The aim of this program is to “develop and examine the sustainability of a relatedness-supportive learning environment for girls in PE” (Gibbons, 2017). Over the course of the program, which was in its fourth year of study at the time of this study, Dr. Gibbons had been working with teachers across British Columbia to explore the efficacy of

implementing relatedness-supportive teaching strategies in girls-only PE classes. To aid the PE teachers in this work, participants were provided with a checklist of activities and strategies that they could integrate into daily lesson plans (see Appendix A).

The teacher. The teacher of the grade 9/10 girls-only PE class was a certified PE teacher with 24 years of teaching experience. The teacher participant had been teaching PE classes for 17 years, and had been teaching girls-only PE classes exclusively for the past 15 years. The teacher had been involved in the *Relatedness-Supportive Learning Strategies for Girls in Physical Education* program since its first year of study. As a result of her involvement in the aforementioned research program, the teacher had been tracking her use of relatedness-supportive teaching strategies, as identified by the relatedness-supportive teaching strategies checklist (see Appendix A) for the past three years. At the time of the study at-hand, the teacher had three grade 9/10, girls' only PE courses under way.

The students. The class that was selected for participation in this study was one of three grade 9/10 girls-only PE classes being taught by the teacher participant during the winter semester. The class included 28 female students, 12 of the students were in grade 9 and 16 of the students were in grade 10. The grade 9 students were in their second semester at the school and were taking this particular PE course for the first time. The grade 10 students were in their second year at the school and had taken this same PE course with the teacher participant in their grade 9 year. Twelve students (5 grade 9's and 7 grade 10's) returned signed parental consent forms and participated in the focus group interview.

Participant Recruitment

The school and teacher participant were identified for inclusion in this study based on the teacher's active participation in the *Relatedness-Supportive Learning Strategies for Girls in*

Physical Education program. Approval from the University of Victoria's Human Research Ethics Board (HREB) was acquired (see Appendix B), followed by approval from School District 61 (see Appendix C). Once approval had been obtained, the prospective teacher participant was contacted and an in-person meeting to discuss the project in greater detail was arranged. The teacher was provided with a consent form (see Appendix D) further outlining the importance of the research and what participation in the study would entail. The teacher was asked to sign and return the consent form to me prior to the scheduled interview.

Once the teacher participant had been recruited and signed consent had been obtained, an information meeting was held with one of her PE classes to introduce the study to the students. The class was selected for participation in the study based on convenience, class make up, and the teacher's perception that the students would be positive about participating in the study. The information meeting was held during a scheduled class time and the purpose of the research project and expectations of participation were described (see Appendix E). Students were told that participation in the study was optional and would have no impact on their position in the class. Furthermore, students were informed that if they chose to participate they could withdraw from the study at any time. All 28 students were sent home with a parental consent form further outlining the importance of the research and what involvement in the project would entail (see Appendix F). Students interested in participating in the study were asked to return a signed consent form to their teacher by the following week. Twelve students (42%) returned signed parental consent forms and participated in the focus group interview.

Data Collection

Data collection procedures used in this study included a semi-structured interview with the teacher participant and a focus group interview with the 12 student participants. As well, I

used weekly class observations to familiarize myself with the learning environment and the context within which the relatedness-supportive teaching strategies were being used. The specific data collection procedures are described in-depth below.

Class observations. With the teacher's consent, I attended the PE class approximately once a week over the course of two months prior to holding the semi-structured and focus group interviews. The class observations were not used as part of the official data collection, but instead were meant to provide context and insight for more rich data collection during the interview process. Through observing the natural setting of the class over the course of the term, I was provided with direct insight into the contextual aspects of the class, including the course content, the learning environment, and the social, emotional, and physical landscape within which the class existed. As well, I was able to observe how the teacher interpreted and implemented various relatedness-supportive teaching strategies into her lesson plans. These weekly visits also allowed the students to become more familiar with me, which may have helped the participants feel more comfortable during the focus group interview.

Semi-structured interview. An in-person, semi-structured interview was held with the teacher participant near the end of the term on May 23, 2017. The interview was designed to provide insight into the teacher's experiences using relatedness-supportive teaching strategies in her class that term. To achieve this, a list of semi-structured interview questions was created and used to guide the interview (see Appendix G). Interview questions were based in part on the relatedness-supportive teaching strategy checklist that the teacher had been using to guide her lesson development and were guided by the research questions under examination. Questions focused primarily on the participant's experience employing relatedness-supportive teaching strategies over the course of the term; with a specific focus on which strategies had proven most

or least effective, challenges associated with employing these strategies, and how the participant felt these strategies had impacted the social and emotional environment of the class.

The interview was approximately 60 minutes in duration, including 10 minutes at the beginning of the interview to go over the consent form and interview procedure. The interview was held in the teacher's office at the school and the teacher was provided with a copy of the interview questions at the start of the interview. As the principal investigator, I facilitated the interview.

Focus group interview. A focus group interview was held with the 12 student participants on June 1, 2017, one week after the teacher interview. The interview was designed to provide insight into the students' experiences with relatedness-supportive teaching strategies in their PE class that term. Specifically, I was interested in exploring whether the use of relatedness-supportive teaching strategies impacted the participants' enjoyment and motivation to engage in PE; as well as whether said strategies impacted their overall feelings of social relatedness. To achieve this, a list of semi-structured interview questions was created and used to guide the interview (see Appendix H). Questions for the focus group interview were guided in part by the responses gleaned from the teacher interview, as well as by the research questions under review. Questions focused on the participant's' experiences with relatedness-supportive teaching strategies, as well as their overall experience in the PE class; special attention was given to the social and motivational environment of the class.

The interview was approximately 60 minutes in duration, including 10 minutes at the beginning of the interview to go over the consent form and interview procedure. The interview was held during the allocated class time in a portable classroom at the school and participants were provided with a copy of the interview questions prior to the start of the interview. As the

principal investigator, I facilitated the interview. Participants were assigned pseudonyms and asked not to use any identifying information during the interview so as to protect anonymity.

Instruments

Interview schedules were used to guide the semi-structured interview and focus group interview (see Appendix E and F). With permission from the participants, both interviews were recorded using a digital recording device and a research assistant took notes to support the recorded data.

Data Treatment and Analysis

Immediately following each interview, the data was transferred to a secure network drive at the University of Victoria, deleted from the recording device, and the interview was transcribed. The transcriptions were analyzed and summarized into preliminary categories and themes using NVivo 11. The categories and themes were generated based on the research questions under investigation.

The Framework Method for qualitative data analysis was used. The Framework Method was developed in the late 1980's by Jane Ritchie and Liz Spencer, researchers at the National Centre for Social Research (Gale, Heath, Cameron, Rashid, & Redwood, 2013). Originally designed as a means of managing and analyzing qualitative data in the context of applied policy research, today its use is gaining in popularity across a wide range of areas (Gale et al., 2013). The Framework Method as described by Ritchie and Spencer (1994) was applied to the semi-structured and focus group interview data. Framework analysis is a systematic approach to data analysis encompassing five key stages: (a) familiarisation; (b) identifying a thematic framework; (c) indexing; (d) charting; and (e) mapping and interpreting (Ritchie & Spencer, 1994).

During the familiarisation stage, I immersed myself in the interview and focus group data by listening to the audio recordings and reading the transcripts. After familiarizing myself with the interviews and transcripts, emerging themes began to present themselves in the data and a thematic framework was identified based on the key issues, concepts, and themes expressed by the student and teacher participants. The thematic framework was then used to sort and classify the data. Next, NVivo 11 was used to index data sections into their corresponding themes and indexed data were arranged into themed charts. Finally, key characteristics of the identified themes were interpreted and connections between categories were mapped to explore possible relationships.

Throughout the data analysis process, constant comparison was also used to compare data within the focus group interview and the semi-structured interview, and to compare aspects between the two data sources. The constant comparison method involves comparing each interpretation and finding that emerges from the analysis, with the findings that have already emerged from the data (Boeije, 2002). This constant comparison approach helped in the sorting and coding of data into appropriate categories.

Assessment of Rigour

Credibility. In order to endorse credibility within the study, I used the following techniques as outlined by Thomas et al. (2005).

1. Prolonged engagement: I periodically observed the class over two months to develop an in-depth understanding of the course setting and the participants.
2. Peer debriefing: the research supervisor questioned my findings to ensure the conclusions were sound.

3. A rich, thick description: the setting and the participants were described in detail to increase credibility and transferability.

Transferability. Transferability refers to the degree to which research results can be transferred to other contexts or settings (Thomas et al., 2005). In order to increase transferability, contextual information about the school and teacher was provided and recommendations for future research and implications of the study at hand are discussed following data analysis.

Dependability. Dependability refers to the need to be flexible to deal with change when collecting data in interview contexts (Thomas et al., 2005). To ensure dependability was high, focus group interviews were semi-structured.

Confirmability. Confirmability refers to the need to allow for readers to have faith that the results of the study are shaped by participants' narratives rather than potential researcher biases (Thomas et al., 2005). In order to ensure confirmability, researcher bias was clarified below by locating the researcher within the study.

Locating the Researcher

As a highly introverted, shy and reserved child, I did not meet the stereotypical temperament or personality of someone who would thrive in an athletically-oriented, team sport atmosphere. However, from an early age I was exposed to sports and physical activity, and I was fortunate in that I had the skill-set needed to succeed in these environments. With the support of my family I was able to find ways of engaging in athletic endeavours that fostered my social and psychological development and well-being.

This early exposure to organized sport stuck with me through my grade school years. Being the reserved child that I was, making friends was never an easy feat for me, but sports teams provided me with an environment where I felt a sense of belonging and confidence that I

often lacked in other social situations. Being a part of a team gave me an identity and a social group that I may not have found at that age otherwise.

It is this personal experience, as well as my more recent experiences as a youth sports coach, which has led to my awareness that while many children may share my inner nature, not all of them may share my positive experiences with physical activity and/or team sports. While team sports do not appeal to everyone, and participation can be inhibited by barriers such as time, cost, and opportunity, PE provides a social, activity-based environment that is available to most everyone through the public education system. However, though PE has the potential to be a particularly useful avenue for fostering positive social experiences while instilling lifelong PA habits among young people, I know from my own personal experiences and observations that this is usually not the case. For these reasons, I chose to examine ways in which teachers could create PE environments which foster perceptions of social belonging and relatedness among young girls. Using self-determination theory as a framework for my study was the logical fit, due to its emphasis on the construct of relatedness as it relates to motivation and engagement.

My participation in athletics has shaped my entire life, giving me a social support network that I would have struggled to find elsewhere, developing a confidence in myself that I otherwise lacked, and leaving me with fond memories of a stage in my life that just as easily could have been a taxing experience for someone with my nature. With this study, I hope to provide insight into the ways in which physical educators can provide positive and supportive social environments within their classes; thus, enhancing their students' feelings of connection and belonging and encouraging continued participation in PA across the lifespan.

Chapter 4: Results & Discussion

The purpose of this research study was to increase our understanding of the role of relatedness-supportive learning environments for enhancing PE and PA motivation and enjoyment among adolescent girls, as well as their overall feelings of social relatedness. This chapter presents the findings derived from the semi-structured and focus group interviews. I will start with a brief discussion of the specific relatedness-supportive teaching strategies that were utilized throughout the term, before presenting the thematic findings. Four themes that address factors affecting enjoyment and motivation to engage in current and future PE and PA were generated from the interview data. A summary of the four themes is presented in Table 1.

Succeeding each theme will be a discussion of the various factors that impacted the usefulness of relatedness-supportive teaching strategies and how teachers can act to ensure that they are implementing these strategies in a meaningful way. This discussion will connect the resulting research themes to past literature reviewed in Chapter 2 in order to answer the research questions under review. The four research questions being addressed are: (a) how did the use of relatedness-supportive teaching strategies affect the female students' perceptions of the learning environment and their motivation to engage in the course content; (b) how did the use of relatedness-supportive teaching strategies affect the female students' decision to continue with future elective PE and/or PA engagement in general; (c) how did the use of relatedness-supportive teaching strategies affect the female students' overall sense of school-community and social-connection; and (d) how did the teacher's perceptions of the effectiveness of the relatedness-supportive teaching strategies compare to those of the students.

Table 1

Summary of the Four Themes

Theme 1	Meeting Students Where They are At
Theme 2	Open, Respectful, and Active Environment
Theme 3	Organic Connection-making
Theme 4	Resource and Curriculum Constraints

Relatedness-Supportive Teaching Strategies

Over the course of the school semester, the teacher participant had been using a relatedness-supportive checklist (see Appendix A) to guide and track her use of relatedness-supportive teaching strategies. During my interview with the teacher participant I asked her to elaborate on the specific strategies she had used over the term, and to provide a narrative of which strategies she deemed to be more or less successful for engaging and motivating her students. Having this insight into the specific techniques the teacher utilized then helped to inform the focus group interview questions and provided a deeper insight into the class context.

Overall, the teacher had utilized strategies from all but one of the seven identified relatedness categories to varying degrees. Category seven, “Include social action/service learning strategies in your PE course,” was the only category the teacher had not incorporated in some way and this was said to be mainly due to a lack of student interest. The most frequently used and seemingly beneficial strategies from the teacher’s perspective included categories: “1. Intersperse teambuilding and/or cooperative games throughout your PE course;” “2. Include a variety of group/partnering strategies in your PE course;” “3: Include a variety of strategies to

create and maintain a respectful and safe environment in your PE course;” “4: Include a variety of strategies to help students learn from each other;” and “5. Include a variety of motivational strategies/activities in PE class.” While effort was made to incorporate strategies from category 6: “Include a variety of strategies/activities to help students explore physical activity opportunities in the community,” the ability of the teacher to do this was limited by time and resource availability.

The activity sub-categories that were used most consistently included: teambuilding exercises, such as icebreakers and cooperative games, and partnering strategies, both of which were typically used at the beginning of the semester but were also occasionally interspersed throughout; small sided games, which were used frequently throughout the term as the teacher viewed them as fun and motivating ways to increase active participation and enjoyment; and peer teaching and informal leadership opportunities.

Finally, a strong emphasis was put on creating and maintaining a respectful and safe environment, as the teacher highlighted that she viewed this as the most important factor for creating relatedness-supportive environments. This included communicating clear expectations of respectful behaviour, role modeling expected behaviour, incorporating sharing and debriefing sessions in class, teaching etiquette and fair play, and including a focus on respect for self and others.

Theme 1: Meeting Students Where They are At

This first theme relates to the teacher’s ability to meet students at their own level and create a learning environment that students feel is conducive to their needs and abilities. Furthermore, it highlights the desire for students to feel competent and autonomous in their learning environment. The focus group analysis suggests that when the students felt that their

teacher was able to meet them at their level, they were more motivated to engage and had a more positive experience in the class. In order to successfully meet these students where they were at, it was important for the teacher to understand her student's abilities and provide learning environments that were adaptable to meet the needs of her students on a given day.

One student expressed this appreciation for adaptable class activities when discussing the teacher's use of small sided games and team building activities:

V: If it's not your day you kind of have an option on what you're going to do on minor games like that. Or just kind of like team building exercises, everyone has their own kind of options based on their day, like what they want to participate in, and I think that's really good.

The teacher also commented on the importance of providing flexibility and creating an environment that students feel to be understanding of their needs.

Teacher: [I hope] they view me much more as somebody that has expectations and wants you to work hard, but at the same time understands if you're having a bad day or understands if something's not quite right and is willing to go, "you know what, this is life and we need to learn to work within our life. And I'm sorry if you're having a bad day today."

Similarly, this need to provide learning environments and course expectations that were conducive to student's abilities was evident through student comments regarding evaluative methods. On occasions when students felt that the teacher's expectations and evaluation did not align with their physical capabilities, they were less motivated to engage. To illustrate this, students provided the example of when they had to run stairs at a nearby park.

S: I don't like how we have to do three sets. 'Cause I feel like for some people with a little lower cardio, cause everyone's at different levels, it can be even really hard for them to get to the stairs and so I don't like how we have to do this many in order to get a decent grade.

K: When you have to do at least three sets of [stairs] and if you don't then you aren't going to get a 5/5 for that day, and then that's going to lower your mark; so then everybody kind of stresses about how they have to get this score.

In response to the above comments, one student provided an example of what she viewed to be a more fair and motivational evaluative method.

K: If we did the stairs and I did two sets, then I would write that day I did it and two sets. And next time I did the stairs if I got three sets, I would write the day I did it and then three sets and the teacher could look and say "from the last time she's gone up a set and I can see that she's improving."

When speaking with the teacher, she also acknowledged the importance of fair evaluative methods that emphasized effort as well as skill development. In particular, the teacher commented on the changes in motivation that could be seen amongst the students once it became clearer that course evaluation would not be based solely on skill or performance ability.

Teacher: I would say once they figured out that I was not judging their performance. And once they realised that it was about putting their best efforts in, doing the best that they can to the best of their ability, and trying all these different activities with a positive attitude. Once they realised that, you could see them go "ahhhh" that sigh of relief. Once they realised that it was not performance based, that really helped.

Interestingly, while the student participants and teacher seemed to agree on the importance of effort-based evaluation, their perceptions of what this type of evaluation might look like appeared to differ. So, while the teacher felt that she was evaluating the students in a way that was supportive of their individual abilities, the students' comments suggested that they did not always perceive this to be occurring.

Another aspect of meeting students where they were at in order to create a more motivational learning environment was providing activities that students find fun and enjoyable. As one student commented, knowing that they had an activity to look forward to in class increased their motivation to attend class.

K: If we know what we're doing and it's a good thing, then yes I like coming to class.

But if you don't know and then you come and you're like "oh I hope I'm not doing the run" or something

While students expressed a desire for activities that they enjoyed, they also acknowledged that due to the mandatory nature of their PE course and the need to meet curriculum requirements, they would not always get to do activities that they enjoyed. However, one student suggested providing incentives in the form of games or activities as a way to enhance motivation for less desirable activities.

K: I think that if teachers planned out the week so on Monday she was like "okay so we're going to do this, and then on Thursday we're going to go for a run, but then on Friday we'll play a game," 'cause we went on the run. And then I think we'd all be like okay we have to go on a run, but it's worth it cause then we get to play a game.

In line with this suggestion, the teacher discussed her occasional use of novelty games or novelty locations, such as runs to coffee shops or playing tennis at a nearby park.

Sometimes we'll have a little scavenger hunt, things like that. Sometimes we'll do like the novelty runs or locations or walks, where we'll go Starbucks at the end of our semester or just before Christmas or something.

Similar to the discussion of evaluative methods, there again seemed to be a disconnect between the perceptions and experiences of the students and those of the teacher. In this case, student 'K' expressed above how the teacher could use incentives to help motivate engagement, while the teacher discussed using these novelty activities. However, the comments suggest the novelty activities may not have been used in a way that the students perceived to be motivating.

The above findings brought to light the idea that in order to effectively meet students where they are at, teachers must also understand how the intersection of perceptions and context may impact their ability to do this. How students interpret the context, purpose, or intent behind relatedness-supportive teaching strategies can impact how they perceive the strategies. In other words, contextual factors impacted how students perceived relatedness-supportive teaching strategies, and thus the potential effectiveness of these strategies for motivating, engaging, and creating a sense of relatedness among students.

This intersection of perception and context can be seen in the student's comments about the use of peer demonstration techniques:

N: I didn't like it during volleyball when she would use us for demonstrations for like a drill.

R: So if you were used as a demonstrator did she just call on you or would you volunteer?

N: Yeah like you wouldn't know if you were being used or not. She would just grab like your group and be like I'm going to use you as a demonstration.

K: It's like not good when it's a drill, But I think that for things like weight room...[when] the grade 10's who the teacher used 'cause we were in class last year. And so we already know how to use the weight room so it's not like we're going to use it wrong. Whereas like in a drill like you could be perfect at volleyball and you could still mess up a drill. And so I think that like with weight room I was more comfortable, I wasn't really on the spot, I was like I know how to use this machine like I have no trouble showing other people."

V: I think almost on some days for like drills or like group demonstrations, the teacher will not pick the group based on the groups with the best skills. She'll kind of pick the group based on who she kind of wants to make a point is like not listening almost.

When students felt they were being called on to demonstrate skills because they were not paying attention or when they did not feel competent in demonstrating the requested skill, they reported negative perceptions of peer demonstration and peer teaching strategies. However, when students felt capable of demonstrating activities or felt that they were being used in more of a leadership context, they reported preferring peer demonstration and peer teaching to teacher instruction. This difference in perceived context significantly impacted how students perceived the relatedness-supportive teaching strategy.

Theme 1 supports the need for teachers to meet students' diverse range of needs and abilities through lesson plans and evaluative approaches. Students wanted to perceive that their teacher was aware and understanding of their varying skill levels and abilities and able to create an environment that was supportive of each student's needs. When students perceived that their

teacher was meeting them at their own level they reported higher levels of motivation and enjoyment when engaging in course content.

Meeting students at their own level can be done in a variety of ways. Based on focus group data, perhaps the most substantive way that a teacher could do this was through providing lesson plans and activities that were adaptable to individual abilities. By providing adaptable lessons, the teacher helped to ensure all students feel competent and capable. As past research has demonstrated, feeling incompetent within the PE learning environment is one of the most frequently reported factors for PE disinclination among young women (Davison et al., 2010). Furthermore, research using a SDT framework has shown that perceived competence and competence-supportive learning environments are among the strongest predictors of intrinsic motivation in PE among adolescent students (Ferrer-Caja & Weiss, 2000; Ntoumanis, 2005; Stormoen & Urke, 2016; Standage et al., 2005). Supporting these past findings, students in this study repeatedly expressed a desire to feel that they were able to competently engage in class activities and that they were able to contribute to group-based games in a positive way. When students felt that activities were conducive to their ability levels, they described increased levels of enjoyment and motivation to engage in class.

However, perhaps more important than feeling competent at specific activities or sports, was students' desires to feel competent at meeting teacher expectations and to feel that they were capable of achieving high grades on unit evaluation. Focus group participants described experiencing increased levels of stress or dread when they felt they were unable to meet the evaluative requirements. This need for students to feel that they were able to achieve course expectations and requirements was also supported by past research into improving girls' experiences with PE. Research by Gibbons (2009) demonstrated that female students valued

authentic assessment and feeling that teacher evaluation processes were based on personal goals and improvement, rather than skill. Supporting this, focus group participants discussed a preference for evaluative methods that focused on personal improvement rather than standardized targets that all students are expected to meet. Likewise, the teacher participant commented on her efforts to emphasise effort over performance when evaluating their students.

As well as ensuring that girls feel competent within their learning environments, teachers can also meet students at their level by providing their students with a sense of choice and autonomy. Past research by Ling and Wang (2009) and Prusak and colleagues (2004) has demonstrated that girls value feeling that they have a choice in course content and that they are involved in decision making processes. By providing students with choice and supporting the autonomy of students, these researchers found that girls experienced more autonomous forms of motivation in PE (Ling & Wang, 2009; Prusak et al., 2004). The value of providing students with choice and influence over their PE activities was also supported by a recent study by Holt and colleagues (2018), where participants described feeling more dedicated to, and engaged in, course activities when they were able to choose ones that interested them. Supporting these previous findings, students in the current study discussed the importance of having a say in the activities that they participated in throughout the term. Likewise, the teacher also expressed the importance of providing her students with choice and took measures to provide students with a sense of autonomy within their learning environment; such as allowing students to vote on unit activities for the term. Qualitative research by Gibbons and Humbert (2008) and Gibbons (2009) has demonstrated that providing students with choice in course activity selection and course development can be an effective method for enhancing female students' enjoyment and continued enrolment in PE.

Beyond just the need to be involved in course decision-making when it comes to activity options, participants also expressed wanting more choice and freedom to adapt daily lesson plans to their needs or emotional states in a given moment. Participants expressed that if they were not feeling well or they were having a bad day, they wanted to feel that they could adapt the lesson plan or activity to support their needs in that moment. Similarly, the teacher expressed her hope that the students viewed them as understanding and respectful of their needs when they were having a hard day. Sparks and colleagues (2015) found similar conclusions in their research exploring relatedness-supportive teaching behaviours. Terming the theme “caring behaviours,” Sparks et al. (2015) determined that one of the most commonly discussed indicators of relatedness-supportive behaviours was the perception that teachers were aware, accepting, and understanding of student’s mood states. Students perceived their learning environments to be relatedness supportive when their teachers noticed low or negative moods and responded in a caring manner, such as allowing the student to sit out that day (Sparks et al., 2015). Supporting the findings from Sparks and colleagues, the teacher and student participants in this study placed similar importance on the need for students to feel that their teacher was understanding and supportive of their needs or issues.

Ensuring students feel competent and autonomous within their learning environment are two of the core constructs of Self-Determination Theory (SDT). As SDT postulates, when students feel that their three basic psychological needs (competence, autonomy and relatedness) are being met, they will be more intrinsically motivated to engage in course content (Deci & Ryan, 1985, 2008). Theme 1 supports this need for perceived competence and autonomy and suggests that meeting students where they are at, and ultimately providing a relatedness-supportive learning environment, can be dependent on the teacher’s ability to support these two

basic needs. When such an environment was present and student participants felt that they were being met at their own level they described increased enjoyment and motivation to engage. Research findings by Holt and colleagues suggested that autonomy supportive learning environments may have a direct, positive impact on students' perceptions of competence and their personal PA experiences (2018). The importance of autonomy and competence when creating relatedness-supportive learning environments can also be seen in the research by Sparks and colleagues (2015, 2017). Themes derived from their research findings demonstrated that teaching behaviours that students perceived to be relatedness-supportive were often conducive to fostering feelings of competence and autonomy among students in the PE environment. When students perceived their teachers to be relatedness-supportive, they felt competent and capable of meeting teacher expectations and that their teachers involved them in decision-making processes and provided the opportunity for students to adapt classes to meet their needs and abilities (Sparks et al., 2015).

This theme of meeting students where they are at is complex in nature and demonstrates that creating relatedness-supportive learning environments is about more than simply what the teacher is doing. The complexity of this theme was illustrated by the distinction between what the teacher was doing and what the students experienced. The teacher's actions were perceived through the students' frame of reference, which appeared to vary from student to student and from day to day. How students perceived the purpose and intent of the relatedness-supportive teaching strategy through their individual frame of reference, shaped their responses to the strategies, and therefore the ability of the strategy to positively motivate and engage students.

In this case, the teacher's efforts to provide fair evaluative methods and choice in course content were not always experienced in that way by the student participants. For example, while

the teacher provided the students with choice and decision-making power when it came to choosing course content through a vote at the start of the term, the students still felt they did not get to try activities that were of interest to them. As well, students expressed wanting more choice on a day-to-day basis to adapt lesson plans to their individual needs. The complexity of providing choice and autonomy supportive programs has been examined in various educational settings and has led to mixed results. While some researchers have determined that providing choice leads to increased motivation, enjoyment, and engagement among students (Gibbons & Humbert, 2008; Ling & Wang, 2009; Prusak et al., 2004), others have found no significant effect on enjoyment and motivation (Stormoen & Urke, 2016); or in some cases have found choice to be detrimental to student motivation (Zach & Yanovich, 2015). In an attempt to better understand the complexity of choice, a discussion paper by Katz and Assor (2006) proposed that choice is motivating when the provided options related to student's interests, were not too complex or numerous, and met students' needs in the given environment or situation.

Supporting this discussion around the difficulties of providing meaningful choice, a study by Sulz and colleagues examined the experiences of students and teachers in a choice-based comprehensive school health program (Sulz, Gibbons, Naylor, & Wharf-Higgins, 2016). Qualitative results determined that while satisfying the need for autonomy was important for successful implementation of the program, achieving autonomy was impacted by the amount of flexibility and the choices offered. In other words, when too much flexibility and choice were offered or the available choices were not meaningful to the participants, it was perceived as overwhelming or controlling, respectively (Sulz et al., 2016). As was seen in the current study, while students were provided with choice in class activities the options that were available to them did not always align with their needs or interests; thus, counteracting the autonomy

supportive intentions of the teacher. As well, the demands on the teacher to meet curriculum requirements meant that the teacher had to navigate balancing student choice against required unit plans and achieving province-wide curricular goals. Holt et al. (2018) found similar complexities when exploring the use of choice in PE courses. While many of the student participants expressed their desire for choice and finding value in being able to choose class activities, some students expressed that the manner in which choice was provided did not enhance their sense of autonomy (2018). In particular, when student-chosen activities reflected the preferences of the more athletic students in the class and emphasized competition, the autonomy and experiences of the less athletic students were negatively impacted (Holt et al., 2018). This complexity of choice issue is a tangible example of how the students' frameworks and perceptions can impact the potential of relatedness-supportive teaching strategies to motivate and engage students.

Another example of this complexity of teacher effort and student perception was evident when looking at the use of peer demonstration techniques. While such strategies were effective for engaging students in some contexts, in other class contexts students perceived them as being punitive. For example, positive reports about peer demonstration and enjoying peer learning were linked with student reports of competence; when students felt capable of demonstrating the activity or skill they reported positively about peer demonstration and they enjoyed peer learning and teaching. However, when students indicated not feeling competent demonstrating the skill or feeling singled out, they viewed peer demonstration in a more negative light. This example again highlights the importance of perceived competence, and also suggests that being open and transparent about the intent behind a given teaching strategy may help teacher's shape students' frame of reference and perceptions. In this case, when the students understood that the teacher

was having them demonstrate activities because of their past experience or knowledge with the activity, they appeared to view peer demonstration and teaching techniques favourably; this insight may have also helped support the students' perceptions of their ability to perform the demonstration. However, when students perceived the teacher to be using these techniques in a negative context, the teaching strategy was perceived poorly; and perhaps their perception of their ability to successfully demonstrate the activity was also affected.

As past research and current findings have demonstrated, effectively meeting students where they are at is a necessary aspect of creating relatedness-supportive learning environments (Sparks et al., 2015). Perceiving their teacher as aware, understanding, and adaptable to their personal circumstances and abilities appeared to play a role in how students reflected on their course experiences. In particular, perceiving that they were competent in meeting teacher expectations, and that the teacher provided a range of activities that accommodated for personal perceptions of competence appeared especially important. The current findings suggest that when students felt competent they were more likely to respond well to the relatedness-supportive teaching strategies, such as peer demonstration techniques. Whereas when students did not feel competent of achieving what was asked of them they responded poorly to the strategies, such as when they perceived evaluative methods to focus on outcome rather than task. Relatedness-supportive teaching strategies appeared to be most effective when the students felt that the strategies were conducive to their unique needs and abilities, ultimately supporting their personal perceptions of competence. When students perceived these things to be occurring, their motivation to engage and their overall enjoyment of the course appeared to be positively impacted.

Theme 2: Open, Respectful, and Active Environment

The second theme demonstrates the influence that an open, respectful and active learning environment can have on student's engagement levels and overall perceptions of PE. When students perceived the learning environment to be open, respectful, and active their comments indicated higher motivation to engage in the course content. As well, when student's felt that such an environment was present their enjoyment of the class and their desire to attend class also increased. This is most evident in one participant's comments regarding a self-defence unit.

V: Self-defense was fun, partially just because the actual self-defence material was fun, but also because it was a good environment. I think that going in everyone kinda thought it was going to be some cop that was going to be talking and angry and lecturing us, and it wasn't like that. It was just more like an open environment and it was really just kinda like based on us.

Similar to the students, the teacher participant also touched on the importance of creating an open and respectful environment. While discussing the different relatedness-supportive teaching strategies she had implemented with her class throughout the term, the teacher placed significant emphasis on her efforts to create a respectful and safe learning environment.

Teacher: Category 3 talks about a variety of strategies to create and maintain a respectful and safe environment; I think that is key. Totally key, and so at the very beginning I do spend a lot of time talking about clear expectations and being respectful and what I expect from them and what they can expect from me. And I try to set that tone of fun-businesslike and friendly and warm so that it's a place that hopefully they will feel safe in and enjoy.

Teacher: I model respectful behaviour and language and tone, and I only expect the same from them so I think it's just we learn what we are allowed to do together.

In creating these open and respectful environments, transparent and consistent communication was viewed as an important factor that needed to be present. Both the students and the teacher touched on the need for consistent communication between the two groups. From the perspective of the students, this need can be seen in their comments highlighting their desire to be viewed as equals. Referring to their self-defence instructor, two students commented:

K: He treated us more like adults and he would tell us really personal stories and things like cases he had to deal with that nobody knows.

N: Yeah he'd tell us like real world stuff that was going on, and he wouldn't be afraid to swear.

The above comments suggest that engaging in conversations of a more personal nature and providing insight into their life outside of the PE environment may help students relate to their teacher or instructor more. The teacher in this study provided a similar commentary when discussing her efforts to develop more meaningful relationships with her students.

I make a point of trying to get to know them. So, "how was your weekend?" and I make a mental note that somebody was off to Alberta for the weekend or somebody had a dance competition. And then I find that they are much more willing to talk with me instead of me always initiating. In the beginning of the semester I always initiate conversation. I find that [now] they are much more willing to initiate with me and talk with me.

The need for consistent and transparent communication was also evident through students' comments expressing the importance of knowing the class lesson plans ahead of time and feeling prepared for each day's activities. When asked if they liked going to their PE class one student responded:

K: If we know what we're doing and it's a good thing, then yes I like coming to class. But if you don't know and then you come and you're like "oh I hope I'm not doing the run" or something.

In reference to the above comment, when asked what they considered to be the 'bad' activities students commented that it was not always the activities themselves, but rather feeling unprepared for what they would be required to do that day, that made class less enjoyable:

T: Or like when you are not prepared for something. Like you come in one day expecting to do something and then it's like you have to do a whole different thing. So you're not mentally prepared to do the thing that we actually have to do.

K: Like I don't even mind doing the runs and stuff but I kind of wish that she'd tell us the day before so that I would know to bring like shorts, rather than leggings or something.

C: I think teachers should try to explain what they're going to do at the beginning of the week so we prepare ourselves for the week.

Like the students, the teacher also emphasized the importance of consistent communication and open conversations for creating a respectful environment. In particular, the teacher acknowledged the importance she placed on communicating clear expectations at the start of the term.

Teacher: at the very beginning I do spend a lot of time talking about clear expectations and being respectful, and what I expect from them and what they can expect from me. And I try to set that tone of fun-businesslike and friendly and warm, so that it's a place that, hopefully, that they will feel safe in and enjoy.

As well, the teacher also discussed the importance of maintaining constant conversation throughout the term to ensure the learning environment remains respectful and enjoyable.

Teacher: Setting boundaries, having explicit conversations about what kinds of behaviour is acceptable and not, and then trying to incorporate lots of cheering and positive things in when we're doing games or doing individual things. We talk about meeting ourselves where we're at and being respectful of our own spaces and not interfering with others and we just, just constant conversation that they just sort of, they catch on to quite easily.

Coinciding with an open and respectful environment, students also expressed a preference for more active and involved learning. Students discussed their preference for activities that required little instruction and lots of active engagement; they wanted to learn on the go, by observing and doing, rather than through sedentary teacher instruction.

This desire for an active learning environment was evident in student responses when asked what activities they had not enjoyed during the term.

V: a lot of the time it doesn't really matter about the unit or whatever it is, just some of the really tedious classes are the ones where you do one thing for like 30 seconds and then it's 10 minutes of straight talking.

N: I think the guy's PE is better than ours, 'cause they just like play a game the entire class. And we have to like talk and then play and talk; whereas they just play.

When the students were asked how they would make PE more meaningful and enjoyable responses again highlighted this preference for more active forms of instruction.

J: If I am the PE teacher I would gather my students into a room and tell them the rules of the game. Then I would divide them into two groups and one group they know the rules and one group they didn't. So the students who don't know the rules they can stand aside and watch and to learn from the others.

R: So you could learn from the people that already know [the game] by watching?

J: Yeah.

K: Or even just like teaching by watching, which they did a bit by getting the volunteers. But like I feel like they could have had somebody demo like even just gagaball. I feel like the first couple times we played we had to stop in the middle so that people could ask a question about one of the rules. And if they'd gotten your team to explain it to you then we'd know it better going into it and then we'd have more time to play 'cause we wouldn't have to stop to answer questions.

Peer teaching and small sided games were viewed by the students as effective techniques for creating open and respectful environments among peers and facilitating more active learning environments. One student commented that she preferred learning from peers as compared to teachers.

K: I would way rather have my friends explain stuff to me than a teacher. Like just teachers in general. I feel like when teachers try to explain stuff to me I just like, I don't know, I don't really get it. But then if my friends explain it to me it's like "ohh!"

Likewise, when asked if their teacher could have done more peer teaching throughout the semester all focus group participants responded positively.

A number of students also expressed their enjoyment of small sided games. When asked what they enjoyed about these games comments included:

S: The competitive atmosphere

A: We move a lot

C: The teacher doesn't have to give [a long] lesson about it...we can just go

K: People actually move, like there's not a lot of people that just stand there. Like people get really into it.

The teacher's comments also acknowledged the benefits of using small sided-games to create more active and involved environments.

Teacher: Always play small-sided games, always, always, always. The more the girls can work together in small groups for a common goal, the more touches they have on the ball in a game, the more involved they become, so I always use small sided games.

Likewise, while the teacher did not comment explicitly on peer teaching techniques, she did acknowledge her frequent use of leadership opportunity strategies such as peer demonstration.

Teacher: Um leadership opportunities, regularly inform leadership opportunities. Always, if I can have students to demonstrate. So I do that all the time.

Theme 2 reinforced the importance of creating learning environments that students perceive to be open and respectful and that provide frequent opportunity for active physical learning and engagement. When focus group participants felt that they were engaged in an open environment in which they could express themselves freely and felt that they were being related to as equals by their teacher and peers, it appeared that their motivation levels and overall enjoyment increased. Furthermore, participants expressed a strong preference for opportunities to actively engage in course material and learn from observing and working with peers, over more lecture-based teacher instruction.

Based on focus group responses, one of the key ways that teachers can work to make classroom environments that are perceived as open and respectful is through transparent and consistent communication. Students expressed wanting to be treated like equals and spoken to like adults. When students felt that their teachers were engaging with them in a way that was in

line with their perceived maturity level, they were better able to relate to their teacher and viewed the learning environment in a more positive manner.

The above findings are consistent with past research in the area of relatedness-supportive teaching behaviours. As Sparks and colleagues (2015) found in their own research, teacher communication emerged as a significant behavioural indicator of relatedness-supportive teachers. Researchers noted that when students felt that teachers made an effort to connect with them on an individual level and were willing to share details of their own lives outside of the school setting, students felt they were being related to in a more meaningful way (Sparks et al., 2015). As well, being treated like equals by their teacher also contributed to students' perceptions of an open, respectful, and relatedness-supportive learning environment (Sparks et al., 2015). Similar to these findings, the teacher in the current study highlighted how her efforts to engage and connect with students in a more meaningful way seemed to help the students feel more comfortable and open around her. As well, the students in the current study commented that when their self-defence instructor shared real-world stories from his work life and engaged in more unimpeded dialogues with them, a sense of respect and openness developed. Furthermore, the students noted that while they had at first been hesitant about having to do a self-defence unit, this open environment played a significant role in their eventual enjoyment of the activity.

Another component of transparent and consistent communication that was important to the students was the need to know lesson plans ahead of time and feel prepared for class activities. Several student participants commented on how they valued knowing in advance what they would be doing so that they felt prepared and well-equipped for every class. On occasions when they felt unprepared for class, or when lesson plans had to be changed at the last minute,

students reported finding it stressful and sometimes frustrating. This desire to feel prepared relates back to the concept of competence. As was already touched on in Theme 1, this need to feel competent in the PE environment has been identified as one of the key contributors to PE enjoyment and motivation (Ferrer-Caja & Weiss, 2000; Ntoumanis, 2005; Stormoen & Urke, 2016; Standage et al., 2005). Based on the current study findings, one way that teachers may be able to support perceptions of competence in their students is to ensure students feel prepared and knowledgeable before coming to class. Providing weekly schedules and ensuring students know what will be expected of them in advance may contribute to students' perceptions of an open and respectful environment. However, it is also important to acknowledge that informing students of less popular activities ahead of time could possibly result in students opting to not attend those particular lessons. So, while in theory providing lesson schedules in advance may help students feel more prepared and competent when they arrive at class, in practice it may have negative consequences with regards to student attendance. Navigating a way to help students feel prepared and competent, while mitigating the potential undesired outcomes mentioned previously, is one of the many challenges that teachers may face when trying to successfully implement relatedness-supportive teaching strategies in their PE classes.

The final aspect that this theme encompasses is student's preference for an active and involved learning environment. Students were more motivated and engaged when they were able to participate in more hands-on learning with little sedentary instruction. They expressed preferences for learning by doing and watching and for peer learning and teaching, as opposed to teacher instruction. While type of activity was important, it was also noted that sometimes it was less about what they were doing and more about having the opportunity to be active.

Past research has supported this idea that, when it comes to girls' enjoyment and engagement in PE environments, activity type is sometimes less important than being involved in a cooperative and engaged learning environment (Cox & Williams, 2008; Levenson et al., 2012). These past studies found that female students tend to put emphasis on social relations over activity type in their PE experiences. This study supported these findings to an extent, in that students preferred games that allowed them to work with and learn from their peers in an active, meaningful, and cooperative way.

Where the current study differs from past research findings is in the students' preference for fast-paced, competitive games. Student participants commented on enjoying games that allowed for friendly competition and lots of active physical engagement. For example, activities that provided a competitive atmosphere, such as minor games, were mentioned as highlights of the term, and regret over not getting to try more physical sports such as rugby and lacrosse were expressed. While past research has found that many female students tend to prefer lifetime physical activities and are turned off by more physical and competitive team sports (Davison et al., 2010; Gibbons & Humbert, 2008; Gibbons, 2009), this did not seem to be the case among the current group of student participants. Instead, these students at times perceived the available activity options to be restrictive and inequitable as compared to the opportunities afforded to the male PE class that they had witnessed. This finding from the current study went against previous findings that traditional, sport-based PE classes can lead to threats to girls' gender identity and that girls desire more gender equitable class environments (Davison et al., 2010; Gibbons & Humbert, 2008). Rather, the current research highlights the fact that all girls are not the same. Thus it is possible that female-friendly PE where competitive games are not included, may not be meeting the needs of some individuals in the class. Instead, providing female-friendly PE seems

to be more about providing students with the autonomy and choice to identify what they perceive to be relevant and meaningful activities; realizing that for some girls this may present as more traditional PE content.

The importance of open, respectful, and active learning environments has been supported quite extensively by the past literature. The current research findings are no exception, highlighting the significance that young women place on being treated like equals and being involved in an open and transparent PE learning environment. In this case study, the effectiveness of relatedness-supportive teaching strategies for fostering motivation and enjoyment among students was highly dependent on this open and respectful environment. In particular, students wanted to feel that their teacher was engaging with them in a consistent and transparent way and was providing abundant opportunities for active and involved learning. When students perceived these things to be occurring, their comments reflected increased motivation to engage in course content, as well as a more positive social environment with their teacher and peers.

Theme 3: Organic Connection-Making

This third theme highlights the importance of creating opportunities for students to develop social relationships in a spontaneous, organic way. Those relatedness-supportive teaching strategies that allowed for more organic social interactions were more effective at enhancing motivation and enjoyment among this group of participants than those strategies that the students perceived to be more contrived. When learning activities provided opportunities for students to engage in deeper, more natural interactions with one another, they were viewed in a more positive light. One of the relational strategies that the teacher in this study used was ice breaker games.

Teacher: Icebreakers, I use them all the time. I try to do that in the very beginning, but then I also will try to throw them in every so often cause they really usually like those.

While the students' feedback indicated that these games were sometimes helpful in the early stages of the term, they were not always perceived as helpful for facilitating meaningful relationships.

V: The games are good like to an extent and then they're just kind of...

L: Yeah after you know someone's name you don't need to keep saying the name.

One student commented that she felt games geared specifically towards meeting people and building relationships were unnecessary, as individuals will develop these relationships on their own.

C: I feel like people can make friends on their own and games don't really... 'cause you instantly connect with people, you don't need to have a game just to make friends with people you just sort of say "hi" on your own time instead of just putting focus on a game.

Though the icebreaker strategies were not viewed as overly effective by the students, other less direct strategies seemed to have an impact on facilitating positive social relationships between students. For example, partnering strategies were seen as a fun and effective way to get to know peers on a more meaningful level.

L: At the beginning when she split us up like not with people that are your friends, you kind of got to know people. Like not even the name game thing, but like with your team, you got to just chill with people and talk while you're playing.

The teacher participant also commented on her use of a variety of different partnering strategies at the start of the term, as she viewed this as an effective way to help students meet their new classmates and ensure nobody was left out.

Teacher: Yeah include a variety of group partnering strategies. I, you know, everybody who has a birthday month in January, everybody who has the same coloured socks, anybody has um you know whatever, height, uh I use all sorts of strategies. I don't do it all the time, I do it more again in the beginning as they get to know each other so that they rotate partners and no one feels like they have to choose a partner. And then after that I do it every so often.

As well, the teacher commented on her use of cooperative games and small-sided games as a way to help initiate student interactions and foster relationships among peers.

Teacher: Cooperative games, I put those sort of all in ice breaker; those are sort of my mini-types of games. Um so I do all of those things. And again, I do concentrate on them mostly in the beginning, but I will revisit them from time to time.

These student and teacher comments both acknowledge the usefulness of team games and partnering strategies for providing an opportunity for authentic and meaningful social interaction and creating a sense of relatedness among students.

Theme 3, “Organic connection-making,” demonstrated the importance of providing opportunities for students to engage in natural and meaningful social interactions. When students felt that class activities provided opportunities to engage with classmates in a fun and interactive way, they perceived the activities to be more enjoyable and reported developing more meaningful relationships with their peers. However, activities that were perceived as more overtly designed to help students get to know each other seemed to be less beneficial for engaging and motivating the students.

For example, in the current study it appeared that opportunities to meet other classmates were perceived more positively if they allowed for mutual engagement in an activity and

relationship building through the activity. Ice breaker strategies that are more purpose built to introduce individuals and facilitate personal knowledge exchanges, were perceived to be more limited in their capacity to support relationship development, and girls indicated that they did not allow for authentic engagement. Instead, student comments supported the use of partnering strategies and team-based activities for facilitating more meaningful social connections between peers. These partnering strategies and team-based activities allowed students to interact and converse in a more genuine way while playing a game or working towards a common goal. Furthermore, the activities that allowed for these types of strategies to be used tended to be more active and physically engaging than ice breaker strategies.

Past research supports these findings around the use of partnering strategies and team-based activities for encouraging peer interaction and cooperation; and ultimately creating a relatedness-supportive learning environment. Sparks and colleagues found that in their research, teachers were viewed as being relatedness-supportive when they provided opportunities for students to work together and engage in team-based activities (2015). As well, the findings demonstrated that the use of partnering strategies as a way of ensuring students work with different classmates, rather than continuously partnering up with their friends, was viewed as a positive strategy for creating relatedness-supportive environments (Sparks et al., 2015).

Though ice-breaker strategies were not perceived in the most positive manner and may have been viewed as unhelpful for fostering a positive social environment among classmates, it is possible that these games were more effective than students perceived them to be. For example, one student referred to a name learning ice-breaker that they played early on in the semester as “more awkward than anything.” However, by facilitating initial interactions between classmates who may not otherwise interact and engaging them in situations that they find to be

awkward or uncomfortable, these games may provide a common ground for students to connect through over time. In other words, the shared experience of feeling awkward, if done so in a safe environment, can provide a relatable experience that leads way to developing a further bond.

It is also important to note that the students who participated in this research study were, on the whole, a fairly outgoing and social group. So, while they may have found some of these strategies to be unnecessary for getting to know their peers, other more reserved groups may find them useful. As past research has supported, often times specific teaching strategies and tailored educational programs are not a one-size fits all approach, and they must be adapted to meet the needs of a diverse range of students (Sparks et al., 2015).

Theme 3 highlights the importance of providing opportunities for students to develop relationships with their peers in a way that they perceive to be organic and meaningful. In the case of the student participants in the current research study, organic connection making was supported through small-sided games and partner engaged approaches. The students appeared to prefer these team-based strategies over what they perceived to be more superficial strategies, such as ice breakers. While ice breaker-type strategies can be helpful at the outset of classes, it appears that the use of these strategies should be applied judiciously. Instead, when the student participants perceived that relatedness-supportive teaching strategies provided opportunities for spontaneous and meaningful social interactions among peers, they typically reported on the class more favourably and comments suggested a more enjoyable and authentic social environment.

Theme 4: Resource and Curriculum Constraints

The fourth and final theme acknowledges the role that constraints associated with resources, time and curriculum can have on a student's PE experience. Focus group data suggests that constraints related to school resources, allocated class time, and required curriculum content

can impact student's perceptions and overall enjoyment of PE. As a result, factors that impact student motivation and enjoyment are sometimes outside of the teacher's control.

An example of how these resource constraints can impact perceptions and experiences in PE was evident in the student comments on last minute changes to class plans.

T: Or like when you like are not prepared for something. Like you come in one day expecting to do something and then it's like you have to do a whole different thing. So you're not mentally prepared to do the thing that we actually have to do.

In contrast, in observing the class and interacting with the teacher throughout the term I was witness to some of these last-minute changes. When they did occur, they were due to changes in space use or unexpected schedule conflicts. For example, one of the self-defence lessons had to be changed because the instructor had been asked to attend to an unrelated issue that had occurred earlier in the day. This conflict did not present itself until the start of the class and as a result the teacher had to come up with a last-minute activity to occupy the students. At other times, school assemblies or events would occupy the gymnasium, meaning that the PE classes that were scheduled to be using the space that day had to find alternative spaces and activities for their class. When comparing the student's comments about unexpected class changes to my own observations and interactions with the teacher, it become evident that what students found frustrating in terms of feeling unprepared for class was not always in the teacher's control; and was perhaps equally as frustrating for the teacher.

Similarly, students made several comments comparing the boy's PE class, which was scheduled during the same period, to their own PE class; stating a preference for the boy's class.

N: I think the guy PE is better than ours, 'cause they just play a game the entire class. And we have to talk and then play and talk; whereas they just play.

However, subsequent comments note that the boy's PE class was a senior elective class and therefore did not have to meet the same content requirements as the mandatory, junior PE courses. Again, this highlights how some of the aspects of PE that the student's find less enjoyable or demotivating are a result of curriculum requirements that the teacher must adhere to.

K: They're the senior class so it's a totally different curriculum. We have to do beep test, we have to do run and stuff, because PE is mandatory. But for them it's optional so they don't have to do that.

As well, the students commented on the lack of variety in some aspects of the course, such as always running the same routes or not getting to try a diverse range of activities. When asked if they would like more opportunities to try new activities in their community one student replied that it provided a refreshing break from their usual units.

L: Yeah just to have more options outside of the usual soccer, badminton, [etc]...like just something we could do like once in a while that we just get excited to do.

A: Like we played volleyball, we played tennis...I mean yeah tennis and badminton.

That's basically all the sports we played. The rest is like minor games and like runs.

A: And I don't think we played a game that doesn't involve a net.

Again, when speaking with the teacher one of the constraints that she noted when it came to her ability to incorporate some of the relatedness-supportive teaching strategies was a lack of time and resources. Not only were classes not long enough to plan out-trips, but the teacher also did not have access to the resources necessary to realize such trips or to engage in certain activities (ie. money, equipment, transportation, etc...). When asked to describe some of the

challenges she had faced when implementing relatedness-supportive strategies, the teacher commented on her ability to incorporate field trips and community-based fitness opportunities:

Teacher: Well so, um obviously money. Cost is a huge issue. We don't have a budget big enough, you know at schools, to do free field trips. Or uh, very many of them.

Transportation is huge. To rent a bus it's so expensive, and then if you're going to do a field trip, the other obstacle is, we only have an hour and twenty minutes. So where can you go, and get back, in an hour and twenty minutes?

Teacher: I would say time and money is the biggest obstacle. Time and money is the key. Um and we are very lucky. We live here, we live close to [recreation centres], we can take advantage sometimes of those activities. And we're close to beaches and [mountains], so we can do those quick things in a block. But you know major field trips to go canoeing or bowling or those types of things are just not in the budget for everybody these days, unfortunately.

The students also commented on how a lack of equipment and time seemed to prohibit them from trying a wider variety of sports during the term.

K: A bunch of us asked if we could play lacrosse and we have lacrosse stuff at our school cause the boys use it and our teacher said that they weren't sure cause we don't have like gear and stuff.

I: I feel like we were supposed to do more like sports and stuff and then we ended up like...we did minor games for a really long time. And then we did volleyball. And then now we're just starting badminton. I feel like we were like planning on doing more.

K: I think we lost time from our self-defence.

Finally, another form of resource constraint that at times may have impacted student experience in the PE course was the nature of a mixed grade level class. Because this class was a grade 9/10 PE class, students in grade 10 had taken the same course in the year prior. As a result, some of the material felt redundant and some students felt they did not get to try activities that they would have liked.

L: Oh yeah, I would have like, if I was a PE teacher I would probably ask like what you didn't do, like from your past years. Like I really wanted to try rugby and field hockey 'cause I'd never played that. But we just did things that I'd done for like three years in middle school.

That being said, the students did note that they were provided with a list of activities to choose from at the start of the term, which ultimately dictated the activities that they engaged in throughout the term. However, based on the students' recollections they felt that the options provided were not fully inclusive of the types of activities they wanted to try.

K: We had like a sheet that we all voted for what our units were gonna be and like we voted for volleyball and badminton were like the highest ones. So that's like why we did those units. But then there were other things like we had to do, like weight room was on there and like a lot of people didn't vote for weight room but she still said we were doing it anyway.

N: Like we go for walks and the guys get to play like football and all these fun like contact sports.

Researcher: So were those [activities] on your list of units you could choose from? Like more physical activities like that?

I: Rugby was the only one.

Theme 4 highlighted the fact that sometimes the ability to successfully implement these relatedness-supportive teaching strategies can be impeded by constraints associated with limited resources, time, and curriculum requirements. The reality of working in the B.C. public school system means that teachers are restricted by available resources, such as sporting equipment, gymnasium space, and transportation; restricted by allocated class time; and restricted by the required curriculum mandates that they must meet.

In speaking with the teacher, it became evident that a limit on time and resource availability at times played a significant role in her ability to implement relatedness-supportive strategies or follow through with intended lesson plans. For example, budget and time constraints limited the teacher's ability to provide more off-campus activity options. Having less than ninety minutes for class and not having the budget to afford school bus transportation meant that they were unable to access fitness opportunities in the community unless they were within walking distance. As well, having only one gymnasium at the school meant that PE classes had to share the space and were at times constrained to a small portable for the duration of a two-week activity unit; thus limiting the space they had to engage in more active options. Similarly, the students commented that occasionally a lack of proper equipment meant that they were not able to try new sports or activities that they had requested. Research has shown that time and resource constraints are a common issue among school-based interventions. As Sulz and colleagues found when implementing a Comprehensive School Health Model in Canadian public schools, time and resource support were identified as two of the key factors that impacted teacher and student experiences (2016).

These time and space constraints also meant that in order for the school to offer a girls-only PE option, they had to make it a mixed grade class. While the students did not directly

comment on their preference for or against the grade 9/10 mixed class, some comments throughout the focus group interview provided insight into some of the pros and cons of this approach. For example, students commented that the mixed grade environment could allow for more opportunities for peer teaching because the grade 10 students, who were already familiar with some of the activities, could provide instruction or demonstration to the grade 9 students. The teacher also seemed to be aware of this advantageous aspect of a mixed grade class, as the students commented that she at times would use the grade 10 students in different leadership roles such as demonstrating techniques in the weight room and leading yoga warm ups. However, this mixed grade environment also meant that the older students had taken this same course in the previous year. As a result, a number of the activities provided throughout the term, though new to the grade 9 students, were familiar to the grade 10 students and having to repeat them felt tedious and redundant.

In order to address some of the downfalls of mixed grade classes, the students felt that using the grade 10's more frequently to help demonstrate or to teach the grade 9 students would be an advantageous option for both groups. By doing this, the grade 10 students may be more engaged in the content and feel as though they are in a more active learning environment, and the grade 9 students could learn from watching and engaging with their peers rather than more sedentary verbal instruction from their teacher. The benefits of peer teaching, for both those doing the teaching and those learning, have been supported by past research (Burton, 2012). In particular, Burton (2012) found that cross-age peer learning, where students learn from their older peers, can be particularly effective in educational settings. Not only was cross-age peer teaching effective for teaching the younger students, it also helped to re-engage the older students in their learning (Burton, 2012).

Along with time and resource constraints, curriculum requirements also occasionally undermined the effectiveness of relatedness-supportive teaching strategies. As discussed above, the mixed grade nature of the class meant that grade 10 students sometimes found class activities to be repetitive of their previous PE experience. However, curriculum and resource constraints restricted what activities the teacher was able to offer. According to the B.C. grade 9 and 10 PE curriculum, PE teachers should be introducing their students to a variety of activities including “individual and dual activities, rhythmic activities, games, and outdoor activities” (British Columbia Ministry of Education, 2016, p.1). As well, under the recent curriculum changes that are currently being piloted in some B.C. schools, PE teachers must now incorporate mental and social health education into their courses within the existing course schedule; further limiting the amount of time allocated for PA engagement (British Columbia Ministry of Education, 2016). These requirements to introduce a range of varied physical activity options and to incorporate mental and social health education may account for some of the frustrations that students expressed when comparing their PE class to the more games-based, senior boys PE class.

Interestingly, this issue of constraints seemed to connect back to the issue of choice. In the examples provided above, all of the seemingly constraint-related issues that the students and teacher touched on were linked to the issue of having choice and variety within the PE environment. The constraints caused by resource availability and curriculum requirements seemed to impact the teacher’s ability to provide students with choice and autonomy, to an extent. As well, the constraints seemed to impact the students’ perceptions of autonomy and choice within the PE environment. Again, this links back to SDT and the interconnectedness of the three basic psychological needs: autonomy, competence, and relatedness (Deci & Ryan,

1985). In order for teachers to fully support perceptions of relatedness among their female students, it appears from the current findings that they must also support perceptions of autonomy and competence; that is to say the three needs may not be mutually exclusive.

Not only did time, resource, and curriculum constraints impact the teacher's ability to implement relatedness-supportive teaching strategies and the student's perceptions of the course, they also played a role in whether students would decide to continue with future elective PE. Of the 12 students in the focus group, all of them expressed some level of interest in taking a senior level PE course. However, only one student expressed actually intending to enrol while the remaining students stated that they would not be enrolling or had to drop the course due to other academic demands. That is to say that, while they wanted to take a senior level PE class, they may be unable to fit it into their timetable due to academic courses required for their post-secondary aspirations. Similar to these findings, Sulz et al. (2016) also found the constraints of academic pressure and time availability to be a restrictive factor to successful implementation of school-based interventions. When describing their experience implementing a Comprehensive School Health model, student participants commented that academic demands and responsibilities conflicted with their ability to engage in the CSH model obligations (Sulz et al., 2016).

The focus group and interview data provided clear support for the idea that, at times, a teacher's ability to successfully implement relatedness-supportive teaching strategies is outside of their control. Instead, time, resource, and curriculum constraints can independently, or in conjunction with one another, impede the teacher's ability to effectively motivate and engage their students in course content; and to ultimately encourage continued participation in future PE opportunities.

Overall, results from this research study were consistent with findings from past research exploring what adolescent girls want out of their PE experiences and what teachers can do to make PE more meaningful for their female students. As well, the current findings provided further insight into how teachers can foster relatedness-supportive learning environments and create motivating and enjoyable PE experiences for young women.

The use of relatedness-supportive teaching strategies was most effective when: students felt that the strategies and class activities were conducive and adaptable to their needs and abilities; students perceived the learning environment to be open and respectful and the strategies allowed for active learning opportunities; the strategies provided opportunities for natural and meaningful social interactions; and the teacher's ability to implement strategies was not impeded by time and resource availability. Theme 1, "Meeting students where they are at," supported the need for teachers to meet students' diverse range of needs and abilities through lesson plans and evaluative approaches. Theme 2, "Open, respectful, and active environment," reinforced the importance of creating learning environments that students perceived to be open and respectful and for providing lots of opportunity for physically active learning and engagement. Theme 3, "Organic connection-making," demonstrated the importance of providing opportunities for students to engage in natural and meaningful social interactions. Theme 4, "Resource and curriculum constraints," highlighted the fact that sometimes the ability to successfully implement these relatedness-supportive teaching strategies can be impeded by resource, time and curriculum constraints. These four themes enabled me to answer each of the research questions under review in this study.

Chapter 5: Implications & Conclusion

The purpose of the current research study was to gain a deeper understanding into the role that relatedness-supportive learning environments play on PE motivation and enjoyment, overall social-connectedness, and future PE engagement, among young female students. As well, I wanted to examine the effectiveness of identified relatedness-supportive teaching strategies for creating these relatedness-supportive learning environments. On the whole, findings suggested that relatedness-supportive teaching strategies may have the ability to enhance motivation and enjoyment, and foster feelings of social-connection in a girls-only PE setting when they are implemented in such a way that is also supportive of perceptions of competence and autonomy. However, these strategies, as well as the other aspects of SDT, did not appear to influence decisions about continued PE enrolment. Instead, it appeared that competing academic demands may overpower the implementation of best practices in this regard. In addition, the findings highlighted the fact that navigating successful relatedness-supportive teaching strategies can be a challenge for teachers, as they are not a one-size-fits-all approach; rather relational strategies are perceived through the lens of competence, choice, social needs, and in terms of a limited time frame for usefulness.

While relatedness-supportive strategies appear to demonstrate the ability to effectively motivate and engage students, the resulting themes suggested that such strategies are only positively motivating when: they are implemented in a manner that meets students at their own level; they are conducive to creating an environment that students perceive to be open, respectful, and active; they allow opportunities for authentic and organic relationship building; and they are not constrained by available resources, time, and curriculum requirements. These

findings lead to a number of practical implications and provide further insight into how teachers can best create relatedness-supportive learning environments in the PE setting.

Perhaps one of the most interesting findings to come out of this research was support for the apparent interconnectedness of the three basic psychological needs as postulated by SDT (Deci & Ryan, 1985; 2000; 2008). While there has been a large amount of research to date supporting the use of SDT as a framework for understanding PE motivation among adolescents, much of this research has postulated that certain needs are more important for enhancing motivation than others; in particular, the need for competence in boys and the need for relatedness in girls (Ntoumanis, 2005; Stormoen & Urke, 2016). Though this may in fact be true, the findings are sometimes presented in such a way that ignores or downplays the potential mitigating role of the other needs. I believe this can be problematic in that it may result in practical interpretations that place strong emphasis on one or two needs, while possibly failing to support the third. Instead, the current research findings suggest that successfully supporting one need, in this case relatedness, may be highly dependent on also supporting the other two basic needs, in this case competence and autonomy. So, while relatedness has been identified by the research as being the most significant need for enhancing PE enjoyment and motivation among young women, it may be that we cannot successfully support this need without also supporting the needs of competence and autonomy. This idea is in line with SDT as a whole, which postulates that all three basic psychological needs must be met for optimal functioning and motivation (Deci & Ryan, 2008); and similar findings have been supported by Sparks and colleagues (2015). Furthermore, though relatedness may have been identified as the most significant psychological need among young women in PE settings, this is likely not a one-size-fits-all finding; much like the successful use of relatedness-supportive teaching strategies. While

relatedness may be most important for some female students, others may place higher importance on competence or autonomy. As was seen among the participants in the current study, being a relatively active and outgoing group, they seemed to place higher emphasis on feeling capable and being involved in an active PE environment that allowed opportunity for competition and choice. By creating learning environments that support all three psychological needs equally teachers may be able to enhance the positive benefits of relatedness-supportive environments, as well as support their students that place higher emphasis on perceptions of competence or autonomy.

The main implication of these findings for real-world application is the idea that relatedness-supportive teaching strategies appear to have the potential to enhance PE motivation and enjoyment among female students; but only if implemented in a meaningful and need-supporting way. In other words, while relatedness-supportive teaching strategies can enhance teachers ability to achieve their desired outcomes, the intricacies of creating relatedness-supportive learning environments is not as simple as employing certain behaviours. Instead, it is important to ensure that strategies are specific and tailored to each student and to each class context. Examples of meeting students where they are at can include allowing students to suggest activities they would like to try – rather than providing them with a pre-established list to choose from – and providing a diverse range of activities throughout the term; using individualized evaluative methods based on personal improvement and effort, rather than skill; and allowing students to adapt activities and lessons to meet their needs or mood states on a given day, whether that means sitting out a lesson or taking a less active and involved role. Each of these examples involves enlisting the students as partners in developing relatedness-supportive

practices, thereby tuning in to the knowledge and wisdom that the students have to offer in this process.

Similarly, these findings have also shown that relatedness-supportive strategies are only as effective as the perceived environment within which they occur. In other words, relatedness-supportive strategies seemed to be most effective when they were conducive to an open and respectful learning environment. Teachers can create open and respectful learning environments by ensuring consistent and transparent communication with their students, both in an academic sense and in a more personal manner. For example, ensuring that students feel prepared and are aware of upcoming lesson plans appears to be an important aspect of an open and respectful environment for students. As well, taking the time to engage in individual conversations with students, asking about their lives outside of the PE class and providing students with a glimpse into your own life outside of the school environment, can help students relate to their teacher more and gives them the sense that their teacher is engaging with them in a more mature and respectful way.

In line with meeting students at their own level and providing a respectful environment, teachers can also create relatedness-supportive environments by providing opportunities for active and authentic opportunities for social engagement. In the case of the student participants in this study, active and authentic opportunities typically involved team-based games, such as minor games, that allowed students to work and engage with peers in a fun and physical environment. Other examples of opportunities for active and organic connection-making may include partnered activities, which allow for more one-on-one interactions, or team teaching, which involves working with one or more peers to teach a skill or activity to the class. As well, incorporating service-learning activities inside or outside of the classroom may also provide

students with opportunities for active and authentic social interactions. While service learning activities were not used by the teacher in this case, research has shown a number of positive benefits associated with volunteer work including enhanced social well-being and community belonging (Kay & Bradbury, 2009; McGuire & Gamble, 2006). One way that teachers could incorporate service learning opportunities into their classes is through partnering with a nearby elementary school and having their PE students create and administer a fun, active PE lesson to the elementary school children. While the impact of this strategy has not been thoroughly explored, it may be one way to enhance both peer-connectedness and community-connectedness, as well as class motivation, among students.

Finally, the reality of working in the public school system and the often times limited resources that are available to teachers also has significant implications on the real-world application of these relatedness-supportive strategies. Learning to navigate the constraints of resources, time allocation, and curriculum requirements, while trying to implement effective relatedness-supportive teaching strategies can prove challenging. In an attempt to mitigate some of the restraints of resource availability and time, teachers could try reaching out to community-based fitness or leisure organizations that may be willing to come to the school and provide activity opportunities that the students would not otherwise have access to. Finding organizations that are willing and able to come into the school would reduce the financial and time constraint barriers of organizing field trips into the community, however this requires substantive organization contribution and there may be no organization that can do this for free. As well, collaborating with other teachers in their departments or teachers at other schools can provide a teacher with resources, knowledge, or ideas that they may not have otherwise had access to; as

well as providing a support-system that can give insight or feedback on effectively using relatedness-supportive strategies.

Though the research findings have provided a greater depth of understanding into how students perceived the PE context and different relatedness strategies, providing some ideas for teachers trying to implement relatedness-supportive teaching strategies and working to ensure their female students' motivation and enjoyment within the PE environment, there are some limitations to this study. Namely, the results of this study only pertain to a subset of students in one, girls-only PE class, at one secondary school. As well, due to the nature of focus group interviews more vocal participants may have silenced the voices of less dominant participants, thus providing an incomplete perspective. To address these limitations, a rich-thick description of the case was used to enhance transferability to other settings and pseudonyms were used when presenting quotes to demonstrate the presence of multiple voices. While the qualitative paradigm makes no claim to generalizable findings, the inclusion of only one focus group in this study does result in a particularly narrow scope of insight into the experiences of female students in the PE environment. In order to gain broader insight into how different students perceive relatedness-supportive teaching strategies in girls-only PE, further research in this area is needed; in particular, more focus group interviews exploring the use of relatedness-supportive teaching strategies are warranted. A next step following this study could be to conduct focus group interviews with the female PE students of the remaining teachers involved in the *Relatedness-Supportive Learning Strategies for Girls in Physical Education* research program.

Furthermore, given that most female students have already started disengaging from PA and PE by the age of 12 (Mitchell, 2015), conducting this research among elementary and middle-school aged children may be beneficial to understand the factors that they perceive as

fostering relatedness-supportive learning environments. As well, a longitudinal study beginning with elementary- or middle-school students and following them as they progress through school-based PE could help uncover any potential long-term benefits of relatedness-supportive PE environments. In other words, could relatedness-supportive learning environments in elementary and middle-school PE, have a positive impact on ensuring students' continued participation in high school PE? Students entering high school have already had numerous experiences with school-based PE and have likely solidified their view of PE one way or another. Therefore, implementing relatedness-supportive teaching strategies beginning in elementary school and continuing throughout middle school and high school, may provide students with a positive social connection early on to allow their view of PE to be a positive one.

The staggeringly low rates of PA engagement among young women and the significantly high rates of PE disaffection among female students are a serious public health concern (Gibbons & Humbert, 2008; Statistics Canada, 2015a). The ramifications of low PA engagement can have lasting implications on the health and well-being of these young women across the lifespan (Hearst et al., 2012). Providing positive PE experiences throughout grade school may be especially beneficial for mitigating these concerns and ensuring girls develop a positive and lasting relationship with PA (Cox & Williams, 2008). Relatedness-supportive teaching strategies that meet students where they are at, support open, respectful, and active learning environments, and allow for authentic and organic connection-making, appear to be an effective way for teachers to motivate their female students to engage in course content and ensure a positive and enjoyable PE experience.

References

- Azzarito, L., Solmon, M. A., & Harrison, L. J. (2006). "...If I had a choice, I would..." A feminist poststructuralist perspective on girls in physical education. *Research Quarterly for Exercise and Sport*, 77(2), 222-239.
- BC Ministry of Education. (2008). *Physical education 8 to 10 integrated resource package*. Retrieved March 10, 2017, from <http://www2.gov.bc.ca/gov/content/education-training/k-12/teach/curriculum/english/physical-education/physical-education-8-10>
- BC Ministry of Education. (2016a). *Area for learning: Physical and health education grade 10: Goals and rationale*. Retrieved February 18, 2018, from <https://curriculum.gov.bc.ca/curriculum/physical-health-education/goals-and-rationale>
- BC Ministry of Education. (2016b). *Area for learning: Physical and health education grade 10*. Retrieved January 20, 2018, from https://curriculum.gov.bc.ca/sites/curriculum.gov.bc.ca/files/pdf/10-12/physical-health-education/en_phe_10.pdf .
- Boeije, H. (2002). A purposeful approach to the constant comparative method in the analysis of qualitative interviews. *Quality & Quantity*, 36, 391-409.
- Brooks, F. M., Smeeton, N. C., Chester, K., Spencer, N., & Klemra, E. (2014). Associations between physical activity in adolescence and health behaviours, well-being, family and social relations. *International Journal of Health Promotion and Education*, 52(5), 271–282. <http://doi.org/10.1080/14635240.2014.923287>
- Burton, B. (2012). Peer teaching as a strategy for conflict management and student re-engagement in schools. *The Australian Educational Researcher*, 39(1), 45-58. DOI 10.1007/s13384-011-0046-4

- Corbin, J., & Strauss, A. (2008). *Basics of qualitative research*. Thousand Oaks: Sage Publications.
- Cox, A. E., & Ullrich-French, S. (2010). The motivational relevance of peer and teacher relationship profiles in physical education. *Psychology of Sport and Exercise, 11*(5), 337–344. <http://doi.org/10.1016/j.psychsport.2010.04.001>
- Cox, A., & Williams, L. (2008). The roles of perceived teacher support, motivational climate, and psychological need satisfaction in students' physical education motivation. *Journal of Sport & Exercise Psychology, 30*, 222-239.
- Davison, K. K., Schmalz, D. L., & Downs, D. S. (2010). Hop, Skip...No ! Explaining adolescent girls' disinclination for physical activity. *Annals of Behavioral Medicine, 39*, 290–302. <http://doi.org/10.1007/s12160-010-9180-x>
- Deci, E. L., & Ryan, R. M. (1985). *Intrinsic motivation and self-determination in human behavior*. New York: Plenum.
- Deci, E. L., & Ryan, R. M. (2000). The “what” and “why” of goal pursuits: Human needs and the self-determination of behavior. *Psychological Inquiry, 11*, 227-268. <http://doi.org/10.1207/S15327965PLI1104>
- Deci, E. L., & Ryan, R. M. (2008). Self-determination theory: A macrotheory of human motivation, development, and health. *Canadian Psychology/Psychologie Canadienne, 49*(3), 182–185. <http://doi.org/10.1037/a0012801>
- Dudley, D. A, Okely, A. D., Pearson, P., & Peat, J. (2010). Engaging adolescent girls from linguistically diverse and low income backgrounds in school sport: a pilot randomised controlled trial. *Journal of Science and Medicine in Sport, 13*(2), 217-224.
- Eime, R. M., Young, J. A., Harvey, J. T., Charity, M. J., & Payne, W. R. (2013). A systematic

review of the psychological and social benefits of participation in sport for children and adolescents: Informing development of a conceptual model of health through sport.

International Journal of Behavioral Nutrition and Physical Activity, 10, 98–119.

<http://doi.org/10.1186/1479-5868-10-98>

Fairclough, S., Stratton, G., & Baldwin, G. (2006). The contribution of secondary school physical education to lifetime physical activity. *European Physical Education Review*, 8(1), 69-84.

Ferrer-Caja, E. & Weiss, M. R. (2000). Predictors of intrinsic motivation among adolescent students in physical education. *Research Quarterly for Exercise and Sport*, 71(3), 267-279 <http://doi.org/10.1080/02701367.2000.10608907>

Felton, G., Saunders, R. P., Ward, D. S., Dishman, R. K., Dowda, M., & Pate, R. R. (2005). Promoting physical activity in girls: A case study of one school's success. *Journal of School Health*, 75(2), 57-62.

Fraser-Thomas, J. L., & Beaudoin, C. (2004). Girls' appreciation of new physical education curriculum classes. *Avanté*, 10(2), 45-56.

Gibbons, S. L., & Gaul, C. A. (2004). Making physical education meaningful for young women: Case study in educational change. *Avanté*, 10(2), 1-16.

Gibbons, S. L., & Humbert, L. (2008). What are middle-school girls looking for in physical education? *Canadian Journal of Education*, 31(1), 1-21.

Gibbons, S. L. (2009). Meaningful participation of girls in senior physical education courses. *Canadian Journal of Education*, 32(2), 222–244.

Gibbons, S. L. (2017). Proceedings from *Relatedness-supportive Learning Strategies for Girls in Physical Education Workshop*. Victoria, BC.

Greater Victoria School District. (2017). School enrollment numbers. Retrieved June 5, 2017

from: <https://www.sd61.bc.ca/schools/school-enrollment-numbers/>

Gruno, J. & Gibbons, S.L. (2016). An exploration of one girl's experiences in elective physical education: why does she continue? *Alberta Journal of Educational Research*, 62(2), 150-167.

Hearst, M. O., Patnode, C. D., Sirard, J. R., Farbakhsh, K., & Lytle, L. A. (2012). Multilevel predictors of adolescent physical activity: A longitudinal analysis. *The International Journal of Behavioral Nutrition and Physical Activity*, 9(1), 8.

<http://doi.org/10.1186/1479-5868-9-8>

Hills, L. (2007). Friendship, physicality, and physical education: an exploration of the social and embodied dynamics of girls' physical education experiences. *Sport, Education, and Society*, 12(3), 335-354.

Holt, A-D., Smedegaard, S., Pawlowski, C. S., Skovgaard, T., & Christiansen, L. B. (2018).

Pupils' experiences of autonomy, competence and relatedness in 'Move for Well-being in Schools': A physical activity intervention. *European Physical Education Review*, 1-19.

DOI: 10.1177/1356336X18758353

Jamner, M. S., Spruijt-Metz, D., Bassin, S., & Cooper, D. M. (2004). A controlled evaluation of a school-based intervention to promote physical activity among sedentary adolescent females: Project FAB. *Journal of Adolescent Health*, 34(4), 279-289.

Katz, I., & Assor, A. (2006). When choice motivates and when it does not. *Educational Psychology Review*, 19(4), 429-442. DOI 10.1007/sl0648-006-9027-y

Kay, T. & Bradbury, S. (2009). Youth sport volunteering: developing social capital? *Sport, Education and Society*, 14(1), 121-140. DOI: 10.1080/13573320802615288

- Ketteridge, A., & Boshoff, K. (2008). Exploring the reasons why adolescents participate in physical activity and identifying strategies that facilitate their involvement in such activity. *Australian Occupational Therapy Journal*, 55(4), 273–282.
<http://doi.org/10.1111/j.1440-1630.2007.00704.x>
- McGuire, J.K. & Gamble, W.C. (2006). Community service for youth: the value of psychological engagement over number of hours spent. *Journal of Adolescence*, 29(2), 289-298. <https://doi.org/10.1016/j.adolescence.2005.07.006>
- Mitchell, F. (2015). A socio-ecological approach to understanding adolescent girls' engagement and experiences in the PE environment: A case study design. *Graduate Journal of Sport, Exercise and Physical Education Research*, 3, 44–62.
- Ntoumanis, N. (2005). A prospective study of participation in optional school physical education using a self-determination theory framework. *Journal of Educational Psychology* 97(3), 444–453. <http://doi.org/10.1037/0022-0663.97.3.444>.
- Olafson, L. (2002). 'I hate phys. Ed.': Adolescent girls talk about physical education. *The Physical Educator*, 59(2), 67-74.
- Pate, R. R., Ward, D. S., Saunders, R. P., Felton, G., Dishman, R. K., & Dowda, M. (2005). Promotion of physical activity among high-school girls: a randomized controlled trial. *American Journal of Public Health*, 95(9), 1582-1587.
- Pfaeffli, L. A., & Gibbons, S. L. (2010). Girls getting active: Exploring a physical education program tailored to young women. *PHEnex Journal*, 2(3), 1-21.
- Prusak, K.A., Treasure, D. C., Darst, P.W., & Pangrazi, R.P. (2004). The effects of choice on the motivation of adolescent girls in physical education, *Journal of Teaching in Physical Education*, 23, 19-29.

- Public Health Agency of Canada. (2011). *The chief public health officer's report on the state of public health in Canada, 2011: Youth and young adults – life in transition*. Ottawa, ON. Retrieved on February 28, 2018, from <https://www.canada.ca/content/dam/phac-aspc/migration/phac-aspc/cphorsphc-respcacsp/2011/pdf/cpho-resp-2011-eng.pdf>.
- Ritchie, J. & Spencer, L. (1994). Qualitative data analysis for applied policy research. In A. Bryman & R.G. Burgess (Eds.), *Analyzing qualitative data* (pp.173-194). London: Routledge.
- Rosenkranz, R. R., Lubans, D. R., Peralta, L. R., Bennie, A., Sanders, T., & Lonsdale, C. (2012). A cluster-randomized controlled trial of strategies to increase adolescents' physical activity and motivation during physical education lessons: The Motivating Active Learning in Physical Education (MALP) trial. *BMC Public Health*, *12*(1), 1. <http://doi.org/10.1186/1471-2458-12-834>
- Ruiz, L. M., Graupera, J. L., Moreno, J. A., & Rico, I. (2010). Social preferences for learning among adolescents in secondary physical education. *Journal of Teaching in Physical Education*, *29*, 3–20.
- Ryan, R. M., & Deci, E. L. (2000). Intrinsic and extrinsic motivations : Classic definitions and new directions. *Contemporary Educational Psychology*, *25*, 54–67. <http://doi.org/10.1006/ceps.1999.1020>
- Shen, B., Mccaughtry, N., Martin, J. J., Fahlman, M., & Garn, A. C. (2012). Urban high-school girls ' sense of relatedness and their engagement in physical education. *Journal of Teaching in Physical Education*, *31*, 231–245.
- Smith, A., Stewart, D., Poon, C., Peled, M., Saewyc, E., & McCreary Centre Society (2014).

From Hastings Street to Haida Gwaii: Provincial results of the 2013 BC Adolescent Health Survey. Vancouver, BC: McCreary Centre Society.

Sparks, C., Dimmock, J., Whipp, P., Lonsdale, C., & Jackson, B. (2015). “Getting connected”: high school physical education teacher behaviors that facilitate students’ relatedness support perceptions. *Sport, Exercise, and Performance Psychology*, 4(3), 219-236.

<http://dx.doi.org/10.1037/spy0000039>

Sparks, C., Lonsdale, C., Dimmock, J., & Jackson, B. (2017). An intervention to improve teachers’ interpersonally involving instructional practices in high school physical education: implications for student relatedness support and in-class experiences. *Journal of Sport & Exercise Psychology*, 39, 120-133. <https://doi.org/10.1123/jsep.2016-0198>

Standage, M., Duda, J. L., & Ntoumanis, N. (2005). A test of self-determination theory in school physical education. *British Journal of Educational Psychology*, 75, 411–433.

<http://doi.org/10.1348/000709904X22359>

Statistics Canada. (2015a). Directly measured physical activity of children and youth, 2012 and 2013. *Health Fact Sheet*. Last updated November 27, 2015.

www.statcan.gc.ca/pub/82-625-x/2015001/article/14136-eng.htm.

Statistics Canada. (2015b). Directly measured physical activity of Canadian adults, 2012 and 2013. *Health Fact Sheet*. Last updated November 27, 2015.

<http://www.statcan.gc.ca/pub/82-625-x/2015001/article/14135-eng.htm>

Stormoen, S., & Urke, H. B. (2016). High school physical education: What contributes to the experience of flow? *European Physical Education Review*, 22(3), 355–371.

<http://doi.org/10.1177/1356336X15612023>

- Sultz, L., Gibbons, S., Naylor, P., & Wharf-Higgins, J. (2016). Complexity of choice: teachers' and students' experiences implementing a choice-based comprehensive school health model. *Health Education Journal*, 75(8), 986-997. DOI: 10.1177/0017896916645936
- Symeon P. Vlachopoulos & Sotiria Michailidou (2006). Development and initial validation of a measure of autonomy, competence, and relatedness in exercise: The Basic Psychological Needs in Exercise Scale. *Measurement in Physical Education and Exercise Science*, 10(3), 179-201. DOI: 10.1207/s15327841mpee1003_4
- Thomas, J., Nelson, J., & Silverman, S. (2005). *Research methods in physical activity* (5th ed.). Champaign, IL: Human Kinetics.
- Ullrich-French, S., McDonough, M. H., & Smith, A. L. (2012). Social connection and psychological outcomes in a physical activity-based youth development setting. *Research Quarterly for Exercise and Sport*, 83(3), 431-441.
<http://doi.org/10.5641/027013612802573049>
- Van Daalen, C. (2005). Girls' experiences in physical education: Competition, evaluation, & degradation. *Journal of School Nursing*, 21(2). 115-121.
- Van den Berghe, L., Vansteenkiste, M., Cardon, G., Kirk, D., & Haerens, L. (2012). Research on self-determination in physical education: Key findings and proposals for future research. *Physical Education and Sport Pedagogy*, 37-41. DOI:10.1080/17408989.2012.732563
- Warburton, D. E. R., Nicol, C. W., & Bredin, S. S. D. (2006). Health benefits of physical activity: The evidence. *CMAJ: Canadian Medical Association Journal*, 174(6), 801-9.
<http://doi.org/10.1503/cmaj.051351>
- Yin, R. K. (2003). *Case study research: Design and methods*. Thousand Oaks, CA: Sage Publications.

Zach, S., & Yanovich, E. (2015). Autonomy, choice, and pupils' motivation — Are they really related? *Advances in Physical Education*, 5, 84–93.

Appendix A: Relatedness-supportive Teaching Strategies Checklist

Keep the definition of “relatedness” and “relatedness supportive” in mind throughout the checklist

Relatedness is the feeling of being connected to others in a social context. In turn, **relatedness-support** refers to the social environments in which individuals have the opportunity to develop healthy relationships with others.

Relatedness supportive strategies in the PE classroom include those strategies you use as a teacher to develop supportive and respectful relationships with your students, and actions to help students develop positive relationships with their PE classmates.

Instructions for completion of checklist:

- In left column: List strategies that are used (as related to category) (e.g. if you use three name games in one class, list the names of the three games).
- In middle “boxes”: for each category of relatedness supportive strategies – record each time you use this category in class put an (e.g. if you use “three name games” in one class, check the box once –not for the number of games).
- In right column: Provide any comment(s) that may provide helpful insight/context

1. Intersperse teambuilding and/or cooperative games throughout your PE course

(Purpose: Help students develop positive connections with classmates and teacher)

↓ Relatedness supportive strategies



↓ Put each time strategy

↓ used in class

a. Use icebreaker and/or name games at beginning of term (help students get to know each other)		↓ Comments that provide insight/context ↓																				
List activities below (e.g. group juggle)	<table border="1" style="width: 100%; height: 100%; text-align: center;"> <tr> <td style="background-color: #e0ffe0;"><input type="checkbox"/></td> <td style="background-color: #e0ffe0;"><input type="checkbox"/></td> <td style="background-color: #e0ffe0;"><input type="checkbox"/></td> <td style="background-color: #e0ffe0;"><input type="checkbox"/></td> <td style="background-color: #e0ffe0;"><input type="checkbox"/></td> <td style="background-color: #e0ffe0;"><input type="checkbox"/></td> <td style="background-color: #e0ffe0;"><input type="checkbox"/></td> <td style="background-color: #e0ffe0;"><input type="checkbox"/></td> <td style="background-color: #e0ffe0;"><input type="checkbox"/></td> <td style="background-color: #e0ffe0;"><input type="checkbox"/></td> </tr> <tr> <td style="background-color: #e0ffe0;"><input type="checkbox"/></td> <td style="background-color: #e0ffe0;"><input type="checkbox"/></td> <td style="background-color: #e0ffe0;"><input type="checkbox"/></td> <td style="background-color: #e0ffe0;"><input type="checkbox"/></td> <td style="background-color: #e0ffe0;"><input type="checkbox"/></td> <td style="background-color: #e0ffe0;"><input type="checkbox"/></td> <td style="background-color: #e0ffe0;"><input type="checkbox"/></td> <td style="background-color: #e0ffe0;"><input type="checkbox"/></td> <td style="background-color: #e0ffe0;"><input type="checkbox"/></td> <td style="background-color: #e0ffe0;"><input type="checkbox"/></td> </tr> </table>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
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↓ Relatedness supportive strategies

↓ Put each time strategy



↓ used in class

b. Use cooperative games/group problem solving activities <u>throughout the term</u>		↓ Comments that provide insight/context ↓																																								
List activities below (e.g. lava field)	<table border="1" style="background-color: #d9ead3; width: 100%; height: 100%;"> <tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> </table>																																									

↓ Relatedness supportive strategies

↓ Put each time strategy



↓ used in class

c. Include additional team building/cooperative games strategies that “fit” in this category (and address purpose) but do not “fit” in either a. or b.		↓ Comments that provide insight/context ↓																																								
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2. Include a variety of grouping/partnering strategies in your PE course

(Purpose: Balance between allowing student to benefit from the support of friends, while also getting to know other students in class)

↓ Relatedness supportive strategies

↓ Put each time strategy

↓

↓ used in class

<p>a. Use a variety of partnering strategies throughout the course</p>		<p>↓ Comments that provide insight/context</p> <p>↓</p>																																									
<p>List strategies below (e.g. find partner with same first initial):</p>	<table border="1" style="margin: auto;"> <tr><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td></tr> <tr><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td></tr> <tr><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td></tr> <tr><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td></tr> </table>																																										

↓ Relatedness supportive strategies

↓ Put each time strategy

↓

↓ used in class

<p>b. Include a variety of ways to divide students into practice groups and/or teams</p>		<p>↓ Comments that provide insight/context</p> <p>↓</p>																																									
<p>List activities below (e.g. same coloured t shirts)</p>	<table border="1" style="margin: auto;"> <tr><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td></tr> <tr><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td></tr> <tr><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td></tr> <tr><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td></tr> </table>																																										

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↓ Relatedness supportive strategies
↓

↓ Put each time strategy
↓ used in class

c. Use **“small sided” games** for practice (increase engagement) ↓ Comments that provide insight/context
↓

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↓ Relatedness supportive strategies
↓

↓ Put each time strategy
↓ used in class

d. Use small group projects/assignments that require students to **“work together and present to classmates”** ↓ Comments that provide insight/context
↓

List below (e.g. dance routines, invent a game assignment)	<table border="1" style="width: 100%; height: 100%; border-collapse: collapse;"> <tr><td style="background-color: #d4f1d4;"> </td><td style="background-color: #d4f1d4;"> </td><td style="background-color: #d4f1d4;"> </td><td style="background-color: #d4f1d4;"> </td><td style="background-color: #d4f1d4;"> </td><td style="background-color: #d4f1d4;"> </td><td style="background-color: #d4f1d4;"> </td><td style="background-color: #d4f1d4;"> </td><td style="background-color: #d4f1d4;"> </td><td style="background-color: #d4f1d4;"> </td></tr> <tr><td style="background-color: #d4f1d4;"> </td><td style="background-color: #d4f1d4;"> </td><td style="background-color: #d4f1d4;"> </td><td style="background-color: #d4f1d4;"> </td><td style="background-color: #d4f1d4;"> </td><td style="background-color: #d4f1d4;"> </td><td style="background-color: #d4f1d4;"> </td><td style="background-color: #d4f1d4;"> </td><td style="background-color: #d4f1d4;"> </td><td style="background-color: #d4f1d4;"> </td></tr> <tr><td style="background-color: #d4f1d4;"> </td><td style="background-color: #d4f1d4;"> </td><td style="background-color: #d4f1d4;"> </td><td style="background-color: #d4f1d4;"> </td><td style="background-color: #d4f1d4;"> </td><td style="background-color: #d4f1d4;"> </td><td style="background-color: #d4f1d4;"> </td><td style="background-color: #d4f1d4;"> </td><td style="background-color: #d4f1d4;"> </td><td style="background-color: #d4f1d4;"> </td></tr> <tr><td style="background-color: #d4f1d4;"> </td><td style="background-color: #d4f1d4;"> </td><td style="background-color: #d4f1d4;"> </td><td style="background-color: #d4f1d4;"> </td><td style="background-color: #d4f1d4;"> </td><td style="background-color: #d4f1d4;"> </td><td style="background-color: #d4f1d4;"> </td><td style="background-color: #d4f1d4;"> </td><td style="background-color: #d4f1d4;"> </td><td style="background-color: #d4f1d4;"> </td></tr> </table>																																									

↓ Relatedness supportive strategies
↓

↓ Put each time strategy
↓ used in class

↓ Comments that provide insight/context
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<p>e. Include additional grouping strategies/activities that “fit” in this category (and address purpose) but do not “fit” in either a., b., c., or d.</p>																																										
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3. **Include a variety of strategies to create and maintain respectful and safe environment in your PE course**

(Purpose: Encourage students to exhibit positive and respectful behavior toward "self and others")

↓ Relatedness supportive strategies

↓ Put each time strategy

↓

↓ used in class

a. Include clear and explicit expectations for respectful behavior (including inclusive language, positive language)		↓ Comments that provide insight/context ↓
For this item – check box once if explained at beginning of course and each time expectations are mentioned in subsequent lessons	<input type="checkbox"/>	
	<input type="checkbox"/>	
	<input type="checkbox"/>	
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	<input type="checkbox"/>	

↓ Relatedness supportive strategies

↓ Put each time strategy

↓

↓ used in class

b. Explicitly address issues such as bullying, harassment, racism		↓ Comments that provide insight/context ↓
For this item – check box once if explained at beginning of course and each time expectations are mentioned in subsequent lessons	<input type="checkbox"/>	
	<input type="checkbox"/>	
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↓ Relatedness supportive strategies
↓

↓ Put each time strategy
↓ used in class

c. Include positive behavior as part of assessment criteria (5 point daily rubric)		↓ Comments that provide insight/context ↓																																								
For this item – check box once if explained at beginning of course and each time expectations are mentioned in subsequent lessons	<table border="1" style="width: 100%; height: 100%;"> <tr><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td></tr> <tr><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td></tr> <tr><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td></tr> <tr><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td></tr> </table>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
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↓ Relatedness supportive strategies
↓

↓ Put each time strategy
↓ used in class

d. Teacher explicitly role models expected behavior (e.g. cheering, clapping for participants)		↓ Comments that provide insight/context ↓																														
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↓ Relatedness supportive strategies
↓

↓ Put each time strategy
↓ used in class

e. Include “sharing/debriefing sessions” in class (e.g. what is going well, issues, positive feelings)		↓ Comments that provide insight/context ↓																																																																																
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↓ Relatedness supportive strategies
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↓ Put each time strategy
↓ used in class

f. Teach etiquette/fair play associated with different activities (e.g. martial arts etiquette)		↓ Comments that provide insight/context ↓																																																																																
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↓ Relatedness supportive strategies
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↓ Put each time strategy
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g. Include units and/or lessons that focus on respect for self and others (e.g. self defense, body image, Dove Campaign)		↓ Comments that provide insight/context ↓																																								
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↓ Relatedness supportive strategies
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↓ Put each time strategy
↓ used in class

h. Include additional strategies/activities that “fit” in this category (and address purpose) but do not “fit” in a. – g.		↓ Comments that provide insight/context ↓																																								
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4. Include a variety of strategies designed to help students learn from each other
(Purpose: Encourage students develop confidence in sharing and respect for the abilities of classmates)

↓ Relatedness supportive strategies
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↓ Put each time strategy
 ↓ used in class

a. Use senior students as positive role models in junior PE courses (e.g. PE Teaching Assistants)		↓ Comments that provide insight/context ↓																																								
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↓ Relatedness supportive strategies
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↓ Put each time strategy
 ↓ used in class

b. Use peer assessment exercises (partner observing and giving feedback)		↓ Comments that provide insight/context ↓																																								
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↓ Relatedness supportive strategies
↓

↓ Put each time strategy
↓ used in class

c. Include assignments/exercises where students teach peers (e.g. student led dances, lead a warm up, teach a game)		↓ Comments that provide insight/context ↓																																								
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↓ Relatedness supportive strategies
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↓ Put each time strategy
↓ used in class

d. Use regular informal leadership opportunities (e.g. student gives demonstration of skill, leads part of warm up, refs game)		↓ Comments that provide insight/context ↓																																								
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↓ Relatedness supportive strategies
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↓ Put each time strategy
↓ used in class

e. Include **additional strategies/activities that help students learn from each other** that “fit” in this category (and address purpose) but do not “fit” in a. – d. ↓ Comments that provide insight/context
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5. Include a variety of motivational strategies/activities in PE class
(Purpose: Helps to keep students actively interested and engaged in PE class)

↓ Relatedness supportive strategies
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↓ Put each time strategy
 ↓ used in class

a. Use music as a motivational tool (e.g. during circuit training, weight training)		↓ Comments that provide insight/context ↓																																								
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↓ Relatedness supportive strategies
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↓ Put each time strategy
 ↓ used in class

b. Use of prizes/trophies/stickers/certificates as motivational tools		↓ Comments that provide insight/context ↓																																								
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↓ Relatedness supportive strategies
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↓ Put each time strategy
↓ used in class

c. Offer different levels of play (e.g. college & pro) to increase engagement		↓ Comments that provide insight/context ↓																																								
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↓ Relatedness supportive strategies
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↓ Put each time strategy
↓ used in class

d. Use novelty themes/games for activities/classes (e.g. Survivor, Amazing Race, super heros, ice cream runs, scavenger hunts, capture the flag)		↓ Comments that provide insight/context ↓																																								
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↓ Relatedness supportive strategies
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↓ Put each time strategy
↓ used in class

e. Use **novel locations** for PE class activities (e.g. yoga in the park, beach run, geocaching in park, 3v3 outdoor bball, mystery runs) ↓ Comments that provide insight/context
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↓ Relatedness supportive strategies
↓

↓ Put each time strategy
↓ used in class

f. Use of **goal setting exercises** in PE classes (e.g. 20 minute challenge, weight training goals, nutrition goals) ↓ Comments that provide insight/context
↓

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↓ Relatedness supportive strategies
↓

↓ Put each time strategy
↓ used in class

g. Include strategies for **celebrating/documenting** involvement in physical activity (e.g. selfie scavenger hunt, taking & sharing pictures of class activities; post pictures on bulletin board) ↓ Comments that provide insight/context
↓

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↓ Relatedness supportive strategies
↓

↓ Put each time strategy
↓ used in class

h. Include **motivational strategies/activities that help students stay engaged PE activities** that “fit” in this category (and address purpose) but do not “fit” in a. – g. ↓ Comments that provide insight/context
↓

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6. **Include a variety of strategies/activities for helping students explore physical activity opportunities in the community**
(Purpose: Make students aware of the physical activity opportunities available to them outside of school)

↓ Relatedness supportive strategies
 ↓

↓ Put each time strategy
 ↓ used in class

a. Include field trips to community physical activity venues (e.g. swimming, skating, rock climbing, rec centres)		↓ Comments that provide insight/context ↓																																								
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↓ Relatedness supportive strategies
 ↓

↓ Put each time strategy
 ↓ used in class

b. Bring in guest physical activity instructors from the community (e.g. yoga instructor, self defense instructor)		↓ Comments that provide insight/context ↓																																								
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7. Include social action/service learning strategies in your PE course
(Purpose: Help students expand their view of involvement in physical activity)

↓ Relatedness supportive strategies
 ↓

↓ Put each time strategy
 ↓ used in class

a. Include informal social action/service learning activities in PE class (e.g. run to park & pick up trash, beach clean up)		↓ Comments that provide insight/context ↓																																								
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↓ Relatedness supportive strategies
 ↓

↓ Put each time strategy
 ↓ used in class

b. Include service leadership activities as part PE (e.g. work with elementary students in PE, big buddy program)		↓ Comments that provide insight/context ↓																																								
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↓ Relatedness supportive strategies
↓

↓ Put each time strategy
↓ used in class

↓ Comments that provide insight/context
↓

c. Participate in community and/or in-school social action events (e.g. Jump rope for heart, hoops for heart, Goddess Run, Terry Fox Run)

<p>Describe here whether participation is “part of PE” or “information is provided in PE” and students attend on their own</p>	<table border="1" style="width: 100%; height: 100px;"> <tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> </table>																																									

↓ Relatedness supportive strategies
↓

↓ Put each time strategy
↓ used in class

↓ Comments that provide insight/context
↓

d. Include additional social action/service learning strategies/activities (and fit purpose of category) but are not included in a. – c.

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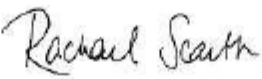


Appendix B: Certificate of Ethics Approval



Office of Research Services | Human Research Ethics Board
 Administrative Services Building Rm B202 PO Box 1700 STN CSC Victoria BC V8W 2Y2 Canada
 T 250-472-4545 | F 250-721-8960 | uvic.ca/research | ethics@uvic.ca

Certificate of Approval

PRINCIPAL INVESTIGATOR: Teresa Hartrick	ETHICS PROTOCOL NUMBER: 17-100 <i>Minimal Risk Review - Delegated</i>
UVic STATUS: Master's Student	ORIGINAL APPROVAL DATE: 05-Apr-17
UVic DEPARTMENT: EPHE	APPROVED ON: 05-Apr-17
SUPERVISOR: Patti-Jean Naylor	APPROVAL EXPIRY DATE: 04-Apr-18
<p>PROJECT TITLE: The Role of Relatedness: Exploring Adolescent Girls' Experiences with Relatedness-Supportive Teaching Strategies in Physical Education</p> <p>RESEARCH TEAM MEMBER Co-investigators: Patti-Jean Naylor (Supervisor, UVic), Dr. Sandra Gibbons (UVic)</p> <p>DECLARED PROJECT FUNDING: None</p>	
CONDITIONS OF APPROVAL	
<p>This Certificate of Approval is valid for the above term provided there is no change in the protocol.</p> <p>Modifications To make any changes to the approved research procedures in your study, please submit a "Request for Modification" form. You must receive ethics approval before proceeding with your modified protocol.</p> <p>Renewals Your ethics approval must be current for the period during which you are recruiting participants or collecting data. To renew your protocol, please submit a "Request for Renewal" form before the expiry date on your certificate. You will be sent an emailed reminder prompting you to renew your protocol about six weeks before your expiry date.</p> <p>Project Closures When you have completed all data collection activities and will have no further contact with participants, please notify the Human Research Ethics Board by submitting a "Notice of Project Completion" form.</p>	
Certification	
<p>This certifies that the UVic Human Research Ethics Board has examined this research protocol and concluded that, in all respects, the proposed research meets the appropriate standards of ethics as outlined by the University of Victoria Research Regulations Involving Human Participants.</p> <p style="text-align: center;"> <hr style="width: 20%; margin: auto;"/> Dr. Rachael Scarth Associate Vice-President Research Operations</p>	

Certificate Issued On: 05-Apr-17

17-100 Hartrick, Teresa

Appendix C: School Board Certificate of Approval

OFFICE OF THE
ASSOCIATE SUPERINTENDENT556 BOLESKINE ROAD VICTORIA, BC V8Z 1E8 FAX (250) 475-4115
Associate Superintendent's Office (250) 475-4220

April 27, 2017

Teresa Hartrick
c/o University of Victoria
School of Exercise Science and
Physical Health Education
3800 Finnerty Rd.
Victoria, BC V8P 5C2

Dear Ms. Hartrick;

Thank you for your recent application regarding your research project, *The Role of Relatedness: Exploring Adolescent Girls' Experiences with Relatedness-Supportive Teaching Strategies in Physical Education*.

Please be advised that your application has been approved to conduct research at [REDACTED]. Permission to proceed with this project is granted during the 2016-2017 school year.

I wish you success with your studies.

Sincerely,

A handwritten signature in black ink, appearing to read "Greg Kitchen".

Greg Kitchen
Associate Superintendent

GK/tc

Cc: [REDACTED]

Appendix D: Participant Consent Form



**University
of Victoria**

Participant Consent Form

Project Title: The Role of Relatedness: Exploring Adolescent Girls' Experiences with Relatedness-Supportive Teaching Strategies in Physical Education:

Researcher: Teresa Hartrick, Graduate Student, School of Exercise Science and Health Education, University of Victoria, PHONE: 250-893-4835, EMAIL: tchartri@uvic.ca

Supervisor: Dr. Patti-Jean Naylor, School of Exercise Science and Health Education, Phone: 250-721-8373, Email: pjnaylor@uvic.ca

Co-Investigator: Dr. Sandra Gibbons, School of Exercise Science and Health Education, University of Victoria Phone: 250-721-8383, Email: sgibbons@uvic.ca

Purpose(s) and Objective(s) of the Research:

- The purpose of this study is to gain insight into the experiences of grade 9 and 10 girls participating in an adapted, girls-only Physical Education course that employs relatedness-supportive teaching strategies. The goal is to increase understanding of the role of relatedness-supportive learning environments for enhancing Physical Education motivation and enjoyment among adolescent girls.
- Relatedness is defined as the feeling of being connected to others in a social context. Relatedness-support refers to the social environments in which individuals have the opportunity to develop healthy relationships with others.

This Research is Important because:

- Physical activity engagement is correlated with a number of physical and psychological health benefits, yet fewer adolescent girls are meeting the recommended physical activity guidelines. Physical Education is viewed as an effective avenue to address issues of physical inactivity and promote life-long physical activity habits, however most young women drop out of physical education once it becomes optional. Research has shown that relatedness-supportive learning environments may be especially important for enhancing Physical Education motivation and enjoyment among adolescent girls and encouraging future participation in physical education courses.

Participation:

- You are being asked to participate in this study because of your on-going involvement in a related research project, *Making Physical Education Meaningful for Girls & Young Women*.

- Participation in this project is entirely voluntary.
- Whether you choose to participate or not will have no effect on you position [e.g. employment] or how you will be treated.

Procedures:

- Participants will take part in a 60 minute, one-on-one interview. The Interview will take place during your designated work day. The researchers will use open questions to facilitate the interview. The interview will be audiotaped and notes will be taken.
- **Duration:** 60 minutes
- **Location:** Mt Douglas Secondary School
- **Inconvenience:** Time

Benefits:

- Benefit to Participants: a chance to discuss and reflect on the perceived challenges and benefits of employing relatedness-supportive teaching strategies and the opportunity to provide suggestions on how future practices might be improved.
- Benefit to Society: An increased understanding of effective teaching strategies and learning environments that enhance adolescent girls' PE motivation will help teachers and school administrators better serve young women in future PE initiatives.
- Benefit to the State of Knowledge: increased understanding of how teachers can provide more relatedness-supportive learning environments for their students and whether such strategies are effective.

Risks:

- There are no known or anticipated risks to you by participating in this research

Withdrawal of Participation:

- You may withdraw at any time without explanation or consequence.
- Should you withdraw, researchers will provide you with a written request for permission to use your data.

Anonymity and Confidentiality:

- Due to the nature of in-person interviews, you will not be anonymous in the data gathering phase of research. However, your anonymity will be protected during the dissemination of the results through the use of pseudonyms and de-identified data.
- In order to protect participant confidentiality, you will be assigned a pseudonym which will be used for data collection audiotapes and transcripts. Audio files and transcribed interviews will be kept in a locked filing cabinet. Interviews will be transcribed by the principal investigator. Participants will be asked not to use identifying information, and transcripts will not contain identifying information, such as names. Only the researchers will have access to the data. The interview files, transcribed data, and any notes taken during the interview will be destroyed after five years.
- Due to the context of the study, there are limits to protecting your confidentiality. Due to the small participant sample, it is possible that some people may be able to guess the identity of the participants. We will address these limits by not using the name of the school or the date of the data collection so that the data cannot be linked to participants.

Appendix E: Student Participant Recruitment Script**University
of Victoria*****Recruitment Script: Group 2***

Hi everyone,

Thanks for having me here. My name is Teresa Hartrick and I am a graduate student at the University of Victoria. I am interested in learning more about girls' PE and how you feel about strategies that teachers use to make PE more enjoyable and inclusive for you - I am here to ask you if you would be willing to participate in my study.

The study involves you participating in a focus group interview with other girls in your class and answering some questions about your experiences in PE this semester. Each focus group interview usually includes about 6-8 students. The focus group interview will be about 45-50 minutes long, will take place during class time and will likely be held at the end of May.

If you think you might be interested in participating, I have an information letter and informed consent package for you and your parents. Please take the package home to read through the information and discuss the opportunity with your parents. If you want to take part in the study and your parents agree, both you and your parent(s) need to sign the consent form, seal it in the envelope and bring it back to your teacher who will give it to me.

If you have any questions about the study or about participating, I'll be around for the rest of your class today or you can find my email and phone number in the information packages provided.

Thanks again for having me and have a great rest of your day!

Appendix F: Parent/Child Consent Form



**University
of Victoria**

Parent/Child Consent Form

Project Title: The Role of Relatedness: Exploring Adolescent Girls' Experiences with Relatedness-Supportive Teaching Strategies in Physical Education:

Researcher: Teresa Hartrick, Graduate Student, School of Exercise Science and Health Education, University of Victoria, PHONE: 250-893-4835, EMAIL: tchartri@uvic.ca

Supervisor: Dr. Patti-Jean Naylor, School of Exercise Science and Health Education, Phone: 250-721-8373, Email: pjnaylor@uvic.ca

Co-Investigator: Dr. Sandra Gibbons, School of Exercise Science and Health Education, University of Victoria Phone: 250-721-8383, Email: sgibbons@uvic.ca

Purpose(s) and Objective(s) of the Research:

- The purpose of this study is to gain insight into the experiences of grade 9 and 10 girls participating in an adapted, girls-only Physical Education course that employs relatedness-supportive teaching strategies. The goal is to increase understanding of the role of relatedness-supportive learning environments for enhancing Physical Education motivation and enjoyment among adolescent girls.
- Relatedness is defined as the feeling of being connected to others in a social context. Relatedness-support refers to the social environments in which individuals have the opportunity to develop healthy relationships with others.

This Research is Important because:

- Physical activity engagement is correlated with a number of physical and psychological health benefits, yet fewer adolescent girls are meeting the recommended physical activity guidelines. Physical Education is viewed as an effective avenue to address issues of physical inactivity and promote life-long physical activity habits, however most young women drop out of physical education once it becomes optional. Research has shown that relatedness-supportive learning environments may be especially important for enhancing Physical Education motivation and enjoyment among adolescent girls and encouraging future participation in physical education courses.

Participation:

- Your child is being asked to participate in this study because of their enrollment in Mrs. Smith's

grade 9/10 girls-only Physical Education class at Mount Douglas Secondary School.

- Participation in this project is entirely voluntary.
- Whether you and your child choose to participate or not will have no effect on their position [e.g. class standing] or how they will be treated.

Procedures:

- Participants will take part in one 60-minute focus group interview. The focus group interview will take place during a designated class time. The researchers will use open questions to facilitate group discussions. The group sessions will be audiotaped and notes will be taken.
- **Duration:** 60 minutes
- **Location:** Mt Douglas Secondary School
- **Inconvenience:** Class time will be utilized for the focus group

Benefits:

- Benefit to Participants: partaking in this research will give participants the chance to discuss and reflect on their experiences in an adapted, girls-only high school Physical Education curriculum. They will be able to provide feedback on teaching strategies and/or activities that they found particularly meaningful or effective in creating more relatedness-supportive learning environments.
- Benefit to Society: An increased understanding of effective teaching strategies and learning environments that enhance adolescent girls' PE motivation will help teachers and school administrators better serve young women in future PE initiatives.
- Benefit to the State of Knowledge: increased understanding of how teachers can provide more relatedness-supportive learning environments for their students and whether such strategies are effective.

Risks:

- There are no known or anticipated risks to you by participating in this research

Withdrawal of Participation:

- You may withdraw at any time without explanation or consequence.
- Should you withdraw, your data will be used in summarized form with no identifying information.

Anonymity and Confidentiality:

- Due to the nature of focus group interviews, participants will not be anonymous in the data gathering phase of research. However, participant anonymity will be protected during the dissemination of the results through the use of pseudonyms and de-identified data.
- In order to protect participant confidentiality, each participant will be assigned a pseudonym that will be used for data collection audiotapes and transcripts. Audio files and transcribed interviews will be kept in a locked filing cabinet. Interviews will be transcribed by the Principal Investigator. Participants will be asked not to identify other people by name, and transcripts will not contain identifying information, such as names. Only the researchers will have access to the data. The focus group files, transcribed data, and any notes taken during the focus groups will be destroyed after five years.
- Due to the nature of focus group interviews and the context of the study, there are limits to protecting the confidentiality of participants. Because focus groups involve multiple participants

who attend the same school, it is possible that other students at the school may be able to guess the identity of participants. Similarly, due to the small participant samples, it is possible that some people may be able to guess the identity of the participants. We will address these limits by not using the name of the school or the date of the data collection so that the data cannot be linked to participants.

Research Results may be Used/Disseminated in the Following Ways:

- Directly to participants; published article; thesis; presentations at scholarly meetings.

Disposal of Data:

- Data from this study will be disposed of after five years. Audiotapes and electronic transcriptions will be erased and paper copies will be shredded.

Questions or Concerns:

- Contact the researchers using the information at the top of page 1;
- Contact the Human Research Ethics Office, University of Victoria, (250) 472-4545 ethics@uvic.ca

Consent:

I, _____ the parent/guardian of _____
 (Please print the name of one or both parents/guardians) (Please print child's first/last name)
 understand the purpose and procedures of this evaluation as described.

Please check the following:

I agree that my child's information can be used for research / evaluation.

I do NOT agree that my child's information can be used for research / evaluation.

I agree that my child can participate in study measurements (survey, focus group)

I do NOT agree that my child can participate in study measurements (survey, focus group)

Name of Parent

Signature

Date

Child's Consent Statement:

I, _____ understand the purpose and procedures
 (please print child's first and last name)
 of this evaluation as described and agree to participate in the study.

Signature of Child

Date

A copy of this consent will be left with you, and a copy will be taken by the researcher.

Appendix G: Teacher Interview Questions



**University
of Victoria**

Interview Questions: Group 1

1. How long have you been using relatedness-supportive teaching strategies with your PE classes?

2. As part of your involvement with the *Making physical education meaningful for girls & young women* study, you were provided with a checklist of relatedness supportive teaching strategies. Using this checklist summary chart as a guide, can you tell me about some of the relatedness strategies that you've used with your class this semester? (Prompts: Teambuilding/cooperative games; Groups and partners; creating a respectful/safe environment; peer teaching; motivational strategies; community physical activity opportunities; social action/social learning)

Probe: Which of these strategies do you think have been the most effective and why?

Probe: Which of these strategies do you think have been the least effective and why?

Probe: Have you used other strategies that fall outside of the checklist categories?

3. What have been some challenges you've faced when trying to use relatedness-supportive strategies?

Probe: How have you addressed these challenges?

4. How would you describe the social environment of the class?

Probe: Can you tell me about how the girls' relationships with each other have developed or changed over the course of the semester?

Probe: Can you tell me about how your relationships with the girls have developed or changed over the semester?

5. How would you describe the motivational climate of the class?

Probe: Has it changed throughout the semester? And if so, how?

6. Can you tell me about any changes you've noticed in your students over the last four months? (prompt: changes in motivation, class engagement, physical activity participation, social interactions, school engagement, self-perceptions/self-esteem/confidence, etc...)

7. Overall, do you think using relatedness-supportive teaching strategies has had an impact on your students or their class experience? And if so, how? (prompts: impacts on motivation, enjoyment, PE engagement, physical activity participation, social-connectedness, school-connectedness, etc...)

8. If you were to hold an interview with your students regarding their experiences in this course, what would you want to ask them or hope to learn from them?

Appendix H: Focus Group Questions



**University
of Victoria**

Focus Group Questions: Group 2

1. I am interested in hearing about your experience in PE 9/10 this semester? (Prompts: have you enjoyed the course? If so, what did you enjoy? If not, what did you not enjoy? What did you learn?)

Probe: Tell me about how it has compared to your past experiences in PE? (Prompts: Has it been similar? more or less enjoyable?)

Probe: What was different? Were there things that were done or activities that made the course more or less enjoyable or meaningful to you?

2. Think about some of the cooperative games you played (e.g....) or team building activities you did (e.g....) throughout the course. (Prompts: [prompts will come from teacher interview data]) Can you tell me about your experience with these activities? (Prompts: What were some things you learned from doing these activities? Why do you think your teacher included them?)

3. Your teacher used different ways to split you into groups or partners throughout the course, tell me about some of the ways she would do this. (Prompts: [prompts will come from teacher interview data]) Tell me about what it was like for you to work in groups or partners. (Prompts: What did you learn from working with different classmates?)

4. Tell me about the social environment of the class (Prompts: was it respectful? Was it inclusive; safe; supportive?)

Probe: Were there things your teacher did that made you feel this way?

Probe: Were there things your classmates did that made you feel this way?

5. Tell me about the motivational atmosphere of the class. (Prompts: Was it interesting/engaging? Did you want to be there? Did you enjoy it?).

Probe: What were some of the things your teacher did in class to help get and keep you motivated to participate (music, prizes, activity, etc...)? What wasn't motivating?

Probes: How do you think classes/material could have been more motivating?

6. I am interested in hearing more about some activities your teacher had you do that allowed you to learn from or teach your classmates (Prompts: [prompts will come from teacher interview data]). Describe what it was like teaching and learning from your classmates.

Probe: What do you think was the benefit to you? (Prompts: What did you learn?)

Probe: What was different when leaning from a peer than learning from your teacher?

7. Tell me about some of the chances you had to explore physical activity opportunities in the community (Prompts: [prompts will come from teacher interview data]). Can you describe what it was like to have these opportunities? (Prompts: What was good about the experiences? What wasn't so good? What did you learn?)

Probe: Were some more meaningful than others and if so, why?

8. Your teacher also provided some opportunities for you to get involved in the community and volunteer in different ways. Tell me about some of the things you did. (Prompts: [prompts will come from teacher interview data]) Can you describe how it felt to participate in these activities? Probes: What was good about the experiences? What wasn't good about it?

Probe: Were some more meaningful than others and if so, why?

9. Has being in this PE class affected your life outside of the course, and if so can you tell me more about that? (Prompts: For instance did you develop new friendships? Did it impact your sense of school connection/community? Did it motivate you to engage in PA outside of class?)

10. After taking this course, do you plan on continuing on with PE once it is no longer mandatory and if so, why? If not, why not?

Probe: Did this change from before the course to after? Probe: Why?

11. If you were the teacher, what types of things would you do to make this course more meaningful for girls your age? (Prompts: Are there any strategies we discussed or that you remember that stood out? Is there anything we haven't talked about or that wasn't done in this class that you think would be helpful?)