

Perceptions of PETE Students about Boys' and Girls' Participation in Elementary and High  
School Physical Education

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## Abstract

Scholars have advocated the need to explore the nature and role of teacher beliefs in teacher education (O'Sullivan, 1996, 2003; Wilson & Berne, 1999; Zeichner, 1999) as they can influence teacher behaviour (Pajares, 1992). Unfortunately, research has shown that many in-service physical education (PE) teachers display gender-biased behaviours, beliefs and practices when interacting with students in a PE setting (Davis, 2003), which in turn, may affect students' participation in PE. However, few studies have investigated these issues from a physical education teacher education (PETE) student belief perspective. This qualitative case study explored how PETE students perceived the participation of girls and boys in PE at the elementary and high school level. Additionally, it attempted to identify any gender-biased beliefs that PETE students may hold about girls' and boys' participation in PE. The PETE students were six females and six males from the same university PETE program in Eastern Canada. Guided by the theory of occupational socialization (Lawson, 1983a, 1983b), data were collected through interviews, questionnaires and checklists. Thematic analyses were performed on verbatim transcriptions of interviews. Four themes were generated from the data: PE participation, PE activity preferences, experiences before PETE and experiences during PETE. The results revealed that female and male PETE students held both similar and different views towards girls' and boys' participation in elementary and high school PE. Additionally, some strong gender-role stereotypes emerged from their discussions. Training in qualitative methods, pilot work, and researcher reflexivity were employed to establish trustworthiness. Initial findings from this study may provide teacher educators with a deeper understanding of how some PETE students view the participation of girls and boys in PE.

## Résumé

Dans le domaine de l'éducation d'enseignants, il est important d'identifier la nature et le rôle des croyances des enseignants (O'Sullivan, 1996, 2003; Wilson & Berne, 1999; Zeichner, 1999), comme celles-ci peuvent influencer leurs comportements (Pajares, 1992). Malheureusement, de nombreux enseignants présentent des comportements, des croyances et des pratiques sexistes envers leurs élèves dans le cadre du cours d'éducation physique (ÉP; Davis, 2003), ce qui pourrait avoir une incidence sur la participation des élèves au cours. À date, peu d'études se sont penchées sur les croyances des étudiants en enseignement de l'éducation physique (EÉP). La présente étude de cas qualitative a exploré les perceptions que portent les étudiants en EÉP envers la participation des filles et des garçons au cours d'ÉP, aux niveaux primaire et secondaire. Cette étude a également tenté d'identifier les croyances sexistes que pourraient avoir les étudiants en EÉP concernant la participation des élèves de chaque sexe au cours d'ÉP. L'échantillon était composé de six mâles et six femelles, au sein du même programme d'EÉP dans l'Est du Canada. Cadré par la théorie de la socialisation occupationnelle (Lawson, 1983a, 1983b), les données ont été amassées à l'aide d'entrevues, de questionnaires et de listes de contrôle. Les entrevues ont été transcrites mot pour mot et analysées par thème. Quatre thèmes ont été extraits des données : la participation au cours d'ÉP, les préférences d'activité en ÉP, les expériences avant l'EÉP et les expériences pendant l'EÉP. D'après les résultats, les étudiants d'EÉP mâles et femelles possédaient des opinions à la fois semblables et différentes envers la participation des deux sexes au cours d'ÉP au primaire et au secondaire. De plus, certains stéréotypes sexistes ont émergé. Afin d'assurer la fiabilité des résultats, les chercheurs ont entrepris une formation en méthodes quantitatives, ainsi que des travaux pilotes et des techniques de réflexivité des chercheurs. Les apports préliminaires de cette étude pourront servir aux formateurs d'enseignants à mieux comprendre comment certains étudiants en EÉP perçoivent la participation des filles et des garçons au cours d'ÉP.

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## Chapter 1

### **Review of the Literature**

The purpose of this case study was to investigate the perceptions of physical education teacher education (PETE) students on the reasons why they thought girls and boys participate and do not participate in elementary and high school physical education (PE). Additionally, this study attempted to identify any gender-biased beliefs held by PETE students about the participation and non-participation of boys and girls in PE. This literature review first outlines the current program structures of PETE programs in North America. Second, the function and formation of teacher beliefs is explored with a summary of research on PETE student beliefs. Next, the gender discourse in PE is discussed. Finally, PETE qualitative and quantitative research methodologies are summarized, with a brief discussion about the selection of a case study design to explore the research questions that drove this qualitative study.

### **PETE in North America**

A description of the nature of PETE programs may help the reader to understand how current PETE students are educated. This literature review begins with an overview of PETE programs in the United States and Canada.

#### **PETE in the United States**

Minimal research has explored PETE programs in the United States (US). Two studies have outlined the structure and curriculum of PETE programs in the US (Ayers & Housner, 2008; Hetland & Strand, 2010). Comprehensive questionnaire data were gathered on 116 and 44 PETE programs respectively (Ayers & Housner, 2008; Hetland & Strand, 2010). The results from these studies will form the basis of the information presented in this section. A description



of PETE accreditation bodies, PETE graduation requirements, PETE student teaching practicums (STP), and PETE curriculum content are provided below.

**Accreditation.** The Council for the Accreditation of Educator Preparation (CAEP; formally known as National Council for Accreditation of Teacher Education [NCATE]) is the accreditation body of the majority of teacher education programs in the US. Over two-thirds of newly trained teachers graduated from programs certified by the CAEP (Butler, 2006). The CAEP identified Specialized Professional Associations (SPA) to establish standards and procedures for program reviews and accreditation of subject specific disciplines. The SPA that represents PETE is the Society of Health and Physical Educators (SHAPE; formally known as the American Alliance for Health, Physical Education, Recreation and Dance [AAHPERD] and the National Association for Sport and Physical Education [NASPE]).

The first PETE accreditation standards were developed in 1985. They have been further revised three times by NASPE in 1995, 2001 and 2008 (NASPE, 2008). NASPE outlined the primary function of PETE programs in a position paper, entitled, *What Constitutes a Highly Qualified Physical Education Teacher*, where they stated:

Physical Education Teacher Education programs should provide pre-service teachers with substantial pedagogical and content knowledge bases; afford many opportunities for pre-service teachers to participate in an array of field experiences where they can interact with veteran teachers and diverse students at all grade levels while seeing the application of classroom principles; and develop, nurture and reinforce specific professional behaviours that facilitate student learning. (NASPE, 2007, p.1)

**Graduation requirements.** PETE students were required, on average, to complete 120.70 credits ( $SD = 13.22$ ) or 129.75 credits ( $SD = 7.8$ ) to graduate from a PETE program (Ayers & Housner, 2008; Hetland & Strand, 2010). Ayers and Housner (2008) organized PETE program credit hours into five categories: (1) the disciplines of sport and physical education (e.g.

anatomy, sport sociology/psychology, motor learning); (2) pedagogical studies (e.g. methods, curriculum, skill analyses); (3) student teaching; (4) sport skills and physical activities (e.g. basketball, dance, tennis); and (5) professional issues (e.g. introductory courses, multicultural courses; see Table 1, Appendix A).

**Student Teaching Practicums.** Student teaching practicums (STP) only occurred in 33 % of PETE programs during the 1980s (Bahneman, 1996). The number of programs that require PETE students to engage in STP has increased since that time. For example, Ayers and Housner (2008) noted that of 113 PETE programs surveyed, 98.3 % provided STP at the elementary level, 96.5% at the middle school level and 100% at the high school level. More specifically, 76 PETE programs indicated that 36.3% of STP occurred during the first year of study ( $n = 41$ ), 40.7% during the second year ( $n = 46$ ) and 18.6% during third year ( $n = 21$ ). The average length of STP was 8.96 weeks at the elementary and high school level and 9.10 weeks at the middle school level (Ayers & Housner, 2008).

Supervisor visitations are a standard component of STP. Supervisors are usually experienced PE teachers or faculty members from the PETE students' respective program. Ayers and Housner (2008) noted that, at all levels of STP (i.e. elementary, middle & high school), the most frequently reported number of supervisor observation visits was three, followed by four and two visits.

**Curriculum content.** Ayers and Housner (2008) identified the curriculum models used by 48 PETE programs in the US where 73% of programs used more than one curriculum model. The most prevalent curriculum models reported were sport education (52%), skill themes (33%) and fitness education (25%). Hetland and Strand (2010) provided a list of curriculum content typically taught in PETE programs throughout the nation. The programs specified how the

curriculum options were taught and delivered to their students (e.g. separate courses, infused with other courses, separately and infused or not covered). Physiology (75%), administration (61.4%), biomechanics (61.4%), historical perspectives (56.8%), adapted physical education (56.8%) and exercise science (50%) were most frequently taught to PETE students in separate courses as reported by the 43 PETE programs who participated in the study (see Table 2, Appendix B).

### **PETE in Canada**

Research examining PETE programs in Canada is also limited. Melnychuk, Robinson, Lu, Chorney and Randall (2011) conducted the only study, to date, to describe the structure of Canadian PETE programs. Data were gathered on 36 PETE educators from 20 Canadian universities through online surveys conducted across Canada. This research is the basis for the information presented in this section. A discussion of Canadian PETE accreditation bodies, PETE faculty and PETE curriculum models follows.

**Accreditation.** Fifty-two educational institutions offer kinesiology and/or physical education undergraduate degrees across Canada (Melnychuk et al., 2011). The Canadian Council of University Physical Education and Kinesiology Administrators (CCUPEKA) is the major PETE accreditation body in Canada. Eleven PETE programs have received formal accreditation to date (University of British Columbia, Queen's University, St. Francis Xavier University, University of Calgary, Brock University, Université de Moncton, University of Toronto, University of Manitoba, Memorial University, Laurentian University, University of Alberta; CCUPEKA, 2014). The purpose of accreditation is to evaluate if programs meet the minimum standards of education and training for potential teacher graduates (Melnychuk et al., 2011). However, since education is a provincial responsibility in Canada, differences in PETE program

course offerings may exist across the 10 provinces (Downey & Bloom, 2004). For example, PETE graduates in Quebec are certified to teach at both the elementary and high school levels while other provincial PETE programs train their undergraduate students to teach at a specific educational level (e.g. elementary, middle, or secondary; Downey & Bloom, 2004).

**PETE educators.** Melnychuk and colleagues (2011) surveyed 36 PETE educators who represented 20 PETE programs across Canada. They noted the following sex and work characteristics of the sample: female (55%), male (45%), full-time tenured (53%), tenure track (14%), full-time sessional lectures (6%) and part-time sessional lecturers (25%). The study also identified differences in beliefs between PETE educators and the perceived beliefs of their institution about their role as teachers. Ninety-four percent of PETE educators believed their most important role was to educate future professionals to effectively teach children and youth in schools and 56% of the teacher educators also believed their institution held this same view. Additional findings revealed that 41% of PETE educators believed that conducting research in PE pedagogy was their most important role according to their institution. None of the study participants suggested that conducting research was their most important role as PETE educators.

**Curriculum content.** The performance-oriented and participation-oriented forms of discourse may best describe PETE programs in Canada (Melnychuk et al., 2011). Performance-oriented discourses are defined as subjects that focus on content areas in biomechanics, exercise physiology, sports psychology, tests and measurement, sports medicine, and fitness training. Participation-oriented discourses concentrate on language about inclusion, equity, involvement, enjoyment, social justice, cooperation, and movement (Tinning, 2004). Melnychuk and colleagues used these definitions and asked PETE educators to indicate the discourse of their university's PETE program. Fifty-seven percent indicated their institution had a dual focus of

participation and performance discourses. Twenty-eight percent felt a performance-oriented discourse was prominent in their program. The remaining 8% indicated a participation-oriented focus guided their program while 8% noted their program was entirely participation based. The PETE educators were also asked to indicate what they believed the discourse of their PETE program should be. Seventy-six percent believed their program should have a dual focus of participation and performance while 18 % of respondents suggested a specific focus on participation, with another 9 % of PETE educators who believed their program should be exclusively participation oriented.

Many PETE programs in Canada include courses from Faculties of Education, Kinesiology and Physical Education (Melnychuk et al., 2011). The PETE educators were also questioned about the compulsory courses in their program. The reported performance-oriented courses were motor learning (75%), human anatomy (73%), biomechanics (67%) and human physiology (67%), sports psychology (58%) and exercise physiology (56%). The physical activity (PA) courses reported were dance and basic movement (72%, which included gymnastics & track and field), exercise and health (68%), recreation (30%) and aquatics (3%).

### **Teacher Beliefs**

Many scholars have advocated the need to explore the nature and role of teacher beliefs in teacher education (O'Sullivan, 1996, 2003; Wilson & Berne, 1999; Zeichner, 1999) as they can influence teacher behaviour (Pajares, 1992). This section of the literature review (a) describes the nature of teacher beliefs, (b) explains how teacher beliefs may be formed and (c) provides an overview of research on PETE student beliefs towards various components of PE and PETE.

## **What are Teacher Beliefs?**

The exploration of teacher beliefs can pose challenges due to the multiple definitions and understandings of these beliefs (Pajares, 1992). Thus, a variety of headings have been used to discuss teacher beliefs that include opinions, attitudes, preconceptions, personal epistemologies, perspectives, perceptions, and orientations (Kagan, 1992; Pajares, 1992). Pajares noted potential challenges for scholars when researching the concept of beliefs. He implied the challenge lies principally in the distinction between beliefs and knowledge and that it is hard to identify where knowledge ends and belief begins. For example, Ennis (1994) described how beliefs could be more problematic to measure directly as compared to factual knowledge. “An individual’s beliefs often must be inferred from statements or actions. They reflect a tacit understanding of personal, social or professional truths that have been constructed over time through enculturation, education or schooling” (p.164).

Teachers in all sub-disciplines of education hold beliefs about their work, their subject matter and the students they teach which, when combined, make up part of their broader belief system (Pajares, 1992; Calderhead, 1996). Teacher beliefs influenced both perceptions and judgments that may have affected their teaching practices (Green, 2000, 2002; Curtner-Smith, 2001). Thus, research about teacher beliefs can aid in understanding teacher thought processes, classroom practices and personal learning about teaching (Richardson, 1996). However, there has been debate as to whether teacher beliefs actually impact their classroom practices (Calderhead, 1996). Some researchers claimed that few studies have examined the link between teachers’ beliefs and their actions (Tsangaridou & O’Sullivan, 2003). Some research suggested a consistent alignment between what teachers believe and a consequent effect on teaching

practices (Chen & Ennis, 1996; Tsangaridou & O'Sullivan, 2003), while other research has displayed inconsistent findings (Kulinna, Silverman, & Keating, 2000; Romar, 1995).

Siedentop and Tannehill (2000) discussed the important link between beliefs and teacher education programs. They suggested pre-service teacher beliefs affect professional interpretations about pedagogical content knowledge (i.e. knowing what and how to teach). For example, some scholars contend the beliefs that teachers hold act as filters through which learning passes. Therefore, beliefs are critical to target and are major determinants of change in teaching practices (Borko & Putnam, 1996). However, some pre-service teachers tend to adopt knowledge and ideas that fit their current belief system and they may ignore ideas that contradict existing beliefs (Doolittle, Dodds & Placek, 1993). For example, some research indicated that teacher training had little impact when it contradicted pre-service teachers' initial beliefs (Clark, Smith, Newby, & Cook, 1985; Doolittle et al., 1993; Kagan, 1992; Lortie, 1975; Zeichner & Tabachnick, 1981). Thus, in order for pre-service teacher beliefs to change, they first must be confronted and challenged about their beliefs through powerful and meaningful experiences. It has been hypothesized that doing so will cause pre-service teachers to recognize the change process and, in turn, bring awareness towards the beliefs they hold (Tom, 1997). Therefore, it is essential for teacher education programs to understand pre-service teacher beliefs in order to change these thoughts. This understanding would likely allow programs to challenge existing beliefs, make pre-service teachers aware of their beliefs and help change and impact teaching practices (Calderhead, 1996; O'Sullivan, 2005; Richardson, 1996; Tsangaridou, 2002)

### **How Are Teacher Beliefs Formed?**

Teacher beliefs are largely formed through a process known as socialization (Lortie, 1975). The socialization process “provides insight into how educators learn to understand and

fulfill professional responsibilities” (Stroot & Williamson, p.337, 1993). Fuller’s Developmental Teacher Concerns Model (Fuller, 1969; Fuller & Brown, 1975) and Occupational Socialization (Lawson, 1983a, 1983b) have been the two major theoretical models to examine the socialization process of PE teachers. Lawson’s model has been more prevalent in the socialization literature in PE, with a greater impact on understanding how teacher beliefs are formed (Stroot & Williamson, 1993). Therefore, the theory of Occupational Socialization (Lawson, 1983a, 1983b) will be further explained in this literature review.

Hal Lawson (1983a, b) identified three distinct phases of occupational socialization of PE teachers: (a) acculturation, (b) professional socialization and (c) organizational socialization. Acculturation is an ongoing process that begins at birth and continues until the start of professional socialization. Life experiences throughout childhood and adolescence may help to shape the teaching beliefs of PETE students during the acculturation period (Matanin & Collier, 2003; Placek et al, 1995; Stroot & Williamson, 1993). For example, PETE students will spend more than 15,000 hours in K-12 classrooms through their own personal experiences as children and young adults before they even enter a teacher preparation program (Lortie, 1975). They develop an understanding of what it means to be a teacher and form opinions on how to teach during their own school years because they are exposed to PE teachers and sport in the school setting (Schempp & Graber, 1992). More specifically, individual views about teaching PE may arise from personal interactions with PE teachers and sport coaches (Mawer, 1996; Stylianou, Kulinna, Cothran & Kwon, 2012), personal experiences in PE (Curtner-Smith, 1999; Evans & Williams, 1989; Green 1998; Schempp, 1989) and school sport (Curtner-Smith, 1999; Dodds et al., 1992). Moreover, the level (e.g. competitive vs. recreational) and type of sport that PETE students participated in, during their own K-12 schooling, may also impact future teaching



beliefs (Curtner-Smith, 1999; Curtner-Smith & Meek, 2000; Green, 1998) and gender-role expectations of boys' and girls' participation in PE (Armour & Jones, 1998; Brown & Evans, 2004).

The next phase, professional socialization, is the impact of PETE on pre-service teachers. More specifically, this phase explores how pre-service teachers learn and sustain the values, knowledge and skills deemed pertinent to PE teaching by the PETE program (Lawson, 1983a). Zeichner and Gore (1990) identified three pedagogical content knowledge areas that influenced the professional socialization process during PETE: (1) general education courses completed outside schools of education, (2) methods and foundations courses and (3) field experiences. However, challenges exist for PETE programs to change inaccurate beliefs about PE held by PETE students. A considerable amount of the education literature suggested that beliefs about PE, formed during acculturation, were not easily changed during the professional socialization phase (Curtner-Smith, 1999; Doolittle et al., 1993; Evans, Davies, & Penney, 1996; Lortie 1975; Green 1998; Placek et al., 1995; Pajares, 1992). Additionally, pre-service teachers were likely to use their field experiences to reinforce their beliefs and values about teaching instead of viewing the experiences as opportunities for professional learning and change (Doolittle et al., 1993; Solomon & Ashy, 1995). PETE programs, successful in transforming inaccurate instructional practices and beliefs, operated when the program was delivered by innovative faculty who: (1) did not coach, (2) had specialist qualification in sport pedagogy, (3) challenged inaccurate beliefs, (4) were highly credible in the eyes of their students and (5) supervised field experiences closely (Curtner-Smith, 1997; 2001).

Organizational socialization, the third and last phase, may be defined as a teacher's initial exposure to a school's culture and identity (Van Maanen & Schein, 1979) and can be described

as “the process by which one is taught and ‘learns the ropes’ of a particular organizational role” (p.211). More specifically, it is considered the manner in which prospective teachers learn what professional behaviours, skills, knowledge and perspectives are acceptable and rewarded by the organization (e.g. school; Lawson, 1983a). Organizational socialization is most often used as a framework to guide research on beginner PE teachers’ entry into the workplace (Stroot & Williamson, 1993; Stroot & Ko, 2006).

Lawson (1983a) expanded on the theory of occupational socialization. He suggested PETE students entered PETE programs with one of two subjective warrants, a coaching orientation or a teaching orientation. These subjective warrants reflect individual perceptions of the skills and abilities deemed necessary for teaching. Lawson noted that some PETE students desired to become PE teachers primarily because they wanted to coach school sport teams and viewed teaching as an afterthought. They were labeled as having a coaching orientation (CO; Curtner-Smith, 2001; Lawson, 1983a). They were also hypothesized to have the following characteristics: (1) participation in high level inter-school sport, (2) male and (3) attended schools with little emphasis on quality instruction during PE lessons but a higher importance placed on extracurricular school team performance (Curtner-Smith, 2001, 2009; Lawson, 1983a). Lawson (1983a) hypothesized that CO PETE students would be completely dedicated to intercollegiate sport and resist changing any inaccurate beliefs about teaching PE with progression through their respective PETE program.

In contrast, Lawson (1983a) identified a different type of PETE student who entered PETE programs. This type of student was primarily concerned with an interest in teaching curricular PE and considered coaching school sport teams to be of secondary importance. They were labeled as having a teaching orientation (TO; Curtner-Smith, 2001; Lawson, 1983a). PETE

students with a TO were hypothesized to have the following characteristics: (1) extensive involvement in PA outside organized, traditional and competitive sport, (2) female and (3) had positive and good quality PE experiences during their school years (Curtner-Smith, 2001,2009; Lawson, 1983a). Thus, PETE students with a TO were hypothesized to more likely adopt and align their views with the teachings and practices of PETE faculty (Lawson, 1983a).

### **Research on PETE student beliefs**

Studies in PETE have examined the beliefs held by PETE students regarding a multitude of topics that include, but are not limited to beliefs about: (a) student teaching practicums (Chepyator-Thomson, & Liu, 2003; Curtner-Smith, 1996; O'Sullivan & Tsangaridou, 1992; (b) adapted physical education practicums (Hodge, Tannehill, & Kluge, 2003); (c) the creation and implementation of student teaching portfolios (Senne & Rikard, 2002); (d) the purposes of PE (Matanin, & Collier, 2003; McCullick, Lux, Belcher, & Davies, 2012; Todorovich, 2009); and (e) PETE students' attitudes about: (1) fitness and skilfulness (Allison, Pissanos, Turner, & Law, 2000; Keating, Silverman, & Kulinna, 1998, 2002;) and (2) teaching students with disabilities (Folsom-Meek, Groteluschen, Nearing, & Krampf, 1999; Goyakla Apache, & Rizzo, 2005; Hodge & Jansma, 2000;Rizzo & Vispoel, 1992). A discussion for each of these topics follows.

**Student teaching practicums.** STP are suggested to be the most important component of teacher preparation programs (Dodds, 1985, 1989; Mitchell & Schwager, 1993; O'Sullivan, 1990; Schempp, 1989). Participation in STP enabled PETE students to evaluate their teaching related skills and abilities which included planning lessons, communicating content to students, class management, adapting instructions to meet individual needs of students and methods of evaluation (Chepyator-Thomson, & Liu, 2003).

The impact of STP on PETE students' conceptions of teaching has been investigated. Curtner-Smith (1996) and O'Sullivan and Tsangaridou (1992) revealed how well-constructed STP provided PETE students with opportunities to explore the meaning of teaching in a school environment. Both studies used open-ended questionnaires and the critical incident technique (Flanagan, 1954) to describe how PETE students were almost exclusively concerned with the technique of teaching PE (Curtner-Smith, 1996; O'Sullivan & Tsangaridou, 1992). No references to political, social, moral, and ethical issues related to their STP experiences were made. PETE students' concerns about the lack of teaching about pedagogical content knowledge in their respective PETE program were noted (Curtner-Smith, 1996; O'Sullivan & Tsangaridou, 1992).

Chepyator-Thomson and Liu (2003) used open-ended questionnaires to examine the reflections of 40 PETE students about their STP experiences at the elementary or high school level. Findings suggested the majority of PETE students felt they had learned skills mostly related to class management and discipline techniques, with fewer opportunities to enhance their technical skills and teaching strategies. Additionally, the PETE students discussed their lack of pedagogical content knowledge during the STP. Similar to the findings of Curtner-Smith (1996) and O'Sullivan and Tsangaridou, (1992), PETE students noted the need for their program to provide a greater emphasis on pedagogical skills and less emphasis on performing physical activities (Chepyator-Thomson & Liu, 2003).

**Adapted physical education practicums.** PETE students' views towards adapted STP have also been explored. Hodge and colleagues (2003) examined the experiences of PETE students' participation in an adapted PE STP. Ten PETE students completed weekly reflections about their STP experiences teaching students with disabilities. Their journals were analyzed using a thematic analysis. The importance of organization and class management when teaching

students with disabilities was noted. More specifically, the PETE students reflected on the need to establish rules and routines to better manage student behaviour. The PETE students rarely discussed the use of elimination type activities in the STP. Instead, references to various adaptations of games and activities to better facilitate learning were noted. Hodge and colleagues (2003) suggested PETE students' attitudes and perceived competency towards teaching students with disabilities were positively influenced by their practicum experience. Additionally, the positive benefits of journaling by PETE students throughout their STP experience were discussed. Writing weekly reflections provided PETE students the opportunity to identify issues, address problems and discuss best teaching practices when teaching students with disabilities (Hodge et al., 2003).

**Student Teaching Portfolios.** The creation of a teaching portfolio is required for many STP. A STP portfolio typically contains documents related to pre-service teacher competencies that include reflections, lesson/unit plans, observations, assessments of student learning, instructional planning and classroom management (Senne & Rikard, 2002). Senne and Rikard used a mixed methods research approach to explore the effectiveness of a teaching portfolio from the perspectives of 67 PETE students engaged in a STP. Data collection included a Defining Issues Test (DIT), weekly reflection logs, and a culminating questionnaire. The DIT measured changes in development stages in principal thinking or moral judgment reasoning. Findings suggested that many PETE students valued the use and creation of their teaching portfolio. However, some students questioned the portfolio's purpose and its ability to document professional growth. Finally, the PETE students identified two major concerns about the teaching portfolio process. Difficulties with time management (e.g. teaching classes each day & creating

the document simultaneously) and the need to introduce the portfolio process earlier in their PETE program were highlighted.

**Purposes of PE.** Matanin and Collier (2003) investigated the teaching beliefs of three PETE students as they evolved through a four-year PETE program. Qualitative data collection included interviews, open-ended questionnaires and document analyses of reflective writings. The promotion of lifelong PA and provision of enjoyable experiences for students were described as the purposes of PE. Quality PE teachers were portrayed as being compassionate, good communicators and strong role models to their students. Planning and assessment in PE was also discussed. For example, the PETE students described how planning may bring credibility to PE and it may take up to three hours a day to perform. Matanin and Collier concluded that PETE students relied on past life, sport and PE experiences to filter pedagogical information taught in their PETE program. These prior experiences also helped the PETE students to make sense of their teaching and recognize their perceived role as a PE teacher.

Todorovich (2009) examined PETE students' perspectives about teaching PE in relation to their achievement goal orientations. Data collection included interviews and participant observations of their teaching. Potential participants completed a Task and Ego orientation in Sport Questionnaire modified for PE (Walling & Duda, 1995). Twenty PETE students were selected with the use of a criterion sampling approach because they possessed extreme ego-orientations. An ego-oriented individual possessed different concepts of ability and effort. For example, individuals with ego-orientations will "comparatively perceive themselves as being more successful if they do better at a task with less effort than someone else" (Todorovich, 2009, p. 157). Findings revealed that ego-oriented PETE students were not concerned about being liked by their students but rather viewed themselves as a source of knowledge from which students

may learn. Additionally, the study noted that the PETE students felt they were not responsible for their students' misbehavior. Rather, they believed student misbehavior occurred for one of two reasons. High ability students in PE misbehaved because they desired to be problematic and cause trouble. Conversely, low ability students misbehaved because they were perceived to be frustrated with their poor performance as a result of their low ability in PE (Todorovich, 2009).

Todorovich also revealed that the ego-oriented PETE students favoured athletes over non-athletes in PE. Thus, athletes were considered to have a preferred status in PE settings. The PETE students believed PE allowed athletes to practice their skills. Moreover, they thought that PE was ideal to find undiscovered athletes who were overlooked by other PE teachers. In comparison to non-athletes, PE was viewed as an opportunity to be active and be released from other school-related classes. Finally, the PETE students felt that athletic students with high ability gained the most from their participation in PE, while non-athletic students received only minor benefits from participation (Todorovich, 2009).

More recently, McCullick and colleagues (2012) conducted a qualitative study that examined the views of 798 PETE students across the US about teaching PE. Using open-ended questionnaires, PETE students described how through their teaching, they wanted to control or direct students' knowledge in elementary and high school PE. For example, words like change, impact, influence, shape and tell were used to describe their objectives and reasons to become a PE teacher (McCullick, et al., 2012). Additionally, PETE students described a desire to provide different PE experiences for their students. For example, the promotion of non-traditional activities and the inclusion of alternative activities and practices in their PE program were discussed. Lastly, the PETE students in the study expressed a desire to elevate the PE profession to be regarded as a legitimate subject in the field of education (McCullick, et al., 2012).

**Fitness and skillfulness.** Fitness tests have been a component of PE programs for the past 100 years (Corbin & Pangrazi, 1992) and they may help students become regularly involved in PA (Jewett, Bain & Ennis, 1995). However, the attitudes of PETE students towards fitness tests are likely related to if and how they plan to use fitness tests in their future teaching of PE (Keating et al., 2002). Additionally, McKenzie and Sallis (1996) suggested that many PETE programs may not be able to sufficiently prepare PETE students to use fitness tests properly.

Keating and colleagues (2002) investigated the factors influencing the attitudes of 617 PETE students towards the use of fitness tests in PE. Participants completed an instrument designed to measure both the affective and cognitive components of attitudes towards fitness testing. Findings indicated the majority of PETE students participated in fitness tests in PE during their K-12 schooling years. However, many believed that fitness tests were neither important nor useful in PE. They reported the attitudes of PETE students towards fitness testing as being only slightly positive. Keating et al. (1998) noted similar results in their study that examined the attitudes of 100 PETE students towards fitness tests. In contrast to the findings of Keating et al. (1998), Keating and colleagues (2002) reported that gender and age had no influence on PETE students' attitudes towards fitness tests. Finally, even as PETE students' professional training increased, their respective PETE programs had minimal impact on their attitudes towards fitness tests (Keating et al., 2002).

The work of Allison and colleagues (2000) studied the epistemological stances of PETE students on movement skillfulness. Through the use of journals, 25 PETE students reflected on the concepts of talent and skillfulness as they participated in three classes in their PETE program (educational dance, educational games and educational gymnastics). Three themes emerged from the study: above average ability, task commitment and creativity. The study noted how PETE



students clearly connected the concept of skillfulness to above average ability. Furthermore, PETE students described skillfulness, as related to movement performance, as having an observable flow, smoothness, efficient, agility and grace (Allison et al., 2000).

Task commitment can be described with words such as determined, self-confident and dedicated (Allison et al., 2000). A recognizable connection between passion and being skillful emerged from the study. For example, skilled persons were described as being committed to their particular area of interest and having a passion for what they do. The word “love” was often used to express a skilled person’s commitment (e.g. loves to play, loves music, loves what he did). Interestingly, Allison et al. indicated that the PETE students felt more comfortable writing their reflections about game players as opposed to dancers or gymnasts. Additionally, talented players were selected for reflections based on gender-role stereotypes. For example, male PETE students only chose other males as examples of talented players in the area of games and female PETE students only chose other females as talented individuals in the area of gymnastics

Finally, PETE students described that skillful movement and skilled persons have an “extra edge, show freedom in their ways of moving, look like poetry in motion and generate awe and amazing among the people who see their performance” (Allison et al., 2000, p. 150) in the final theme of creativity. The study concluded that PETE students directly linked skillfulness to teaching and viewed the concept of skillfulness as inherited rather than learned (Allison et al., 2000).

**Teaching students with disabilities.** Research on teacher beliefs towards teaching students with disabilities in PE had an increased focus after the implementation of the “Education of All Handicapped Children Act” of 1975 also known as P.L. 94-142 (Kozub & Lienert, 2003). Three main instruments were developed to measure PETE students’ attitudes

toward teaching students with disabilities (Hutzler, 2003): Physical Educators' Attitude Toward Teaching the Handicapped (PEATH-II) survey (Rizzo, 1988; Rizzo & Vispoel, 1991, 1992), Physical Educators' Attitude Toward Teaching Individuals with Disabilities (PEATID-III; Rizzo, 1993a) and Physical Educators' Attitude Toward Teaching Individuals with Disabilities Pre-service Version (PEATID-III PS; Rizzo, 1993b). The three instruments were created and designed around the Theory of Planned Behaviour (see Ajzen, 1985) as their theoretical framework (Hutzler, 2003).

Rizzo and Vispoel (1992) used the PEATH-II instrument to study the influence of PE courses on PETE students' attitudes towards teaching students with disabilities. Two PETE courses, Adapted Physical Education and Physical Education for Children, were examined in the study. The courses had an enrollment of 77 and 97 PETE students respectively. Findings from the study indicated that attitudes towards teaching students with disabilities improved significantly in the adapted physical education class. No significant change in attitudes was noted from PETE students enrolled in the physical education for children class.

Folsom-Meek and colleagues (1999) used the PEATID-III PS (Rizzo, 1993b) to examine the attitudes of pre-service teachers towards teaching students with disabilities. The pre-service teachers included PETE majors, special education majors, elementary education majors and therapeutic recreation majors. Three variables were explored: (1) academic major, (2) gender, and (3) prior experience with individuals with disabilities. Three findings were revealed in this study. First, PETE students had less favourable attitudes towards teaching students with disabilities compared to students in other majors. Next, female pre-service students held more favourable attitudes than male pre-service students. Finally, pre-service students, who had prior

experience with people with disabilities, held more positive attitudes compared to students without such experiences.

Hodge and Jansma (2000) used the PEATID-III (Rizzo, 1993a) to explore the attitudes of 582 PETE students towards teaching students with disabilities. Five variables were explored: (1) gender, (2) ethnic status, (3) prior experiences teaching individuals with disabilities, (4) course work, and (5) perceived comfort level in teaching students by disability type (e.g. sensory or physical disabilities). Three major findings were reported. First, female PETE students possessed more favourable attitudes towards teaching students with disabilities compared to male PETE students. Second, the perceived comfort level toward teaching students with disabilities was significantly higher in females as opposed to males. Finally, PETE students, who took preparatory courses to teach students with disabilities, were more comfortable teaching students with sensory and physical disabilities.

Goyakla Apache and Rizzo (2005) then examined how an infusion-based curriculum would affect the attitudes of PETE students towards teaching students with disabilities over the course of one academic year. An infusion-based curriculum model systematically integrates issues, knowledge and awareness of individuals with disabilities throughout a PETE curriculum (Kowalski, 1995). The PEATID-III instrument was used to explore the attitudes of 91 PETE students. The study revealed that both male and female PETE students reported an increased confidence in their teaching and an appreciation for teaching students with disabilities. Additionally, PETE students' believed that students with disabilities should be educated in inclusive physical education classes and not solely in adapted physical education classes.

## **Gender Discourse in PE**

This section of the literature review explains the common terminology used in gender research, provides a brief overview of the Title IX legislation and outlines the literature on the gender beliefs and attitudes of in-service PE teachers.

### **Terminology in gender research**

Much of the literature and discourse on gender issues in PE have used the terms *sex* and *gender* interchangeably (Kirk, 2003). However, these terms are distinctly different. In its most basic form, sex is biologically determined, and gender is socially determined (Torgrimson & Minson, 2005). More explicitly, the term sex has been defined as the biological characteristics of femaleness and maleness and the term gender has been used to refer “to a socially constructed pattern of behaviour recognized as feminine or masculine” (Kirk, 2003, p. 69). The term gender has also been used to refer to an individual’s self-representation as male or female and how social institutions (e.g. school) respond to individuals on the basis of their gender presentation (Torgrimson, & Minson, 2005). Using the term gender opposed to the word sex may be preferred as it allows debates about women’s and men’s participation in physical activities and sport to go beyond biological makeup and to also involve psychological, social and cultural issues (Kirk, 2003; Evans & Penny, 2002).

Gender-roles and gender-role stereotypes are other commonly used terms in research on gender issues. Therefore to clarify, gender-roles may be used to indicate activities that are considered appropriate for males and females to engage in because the roles are based on socially constructed behaviours. For example, the repair of cars may be predominately associated with men and the repair of clothing may be predominately associated with women (Brannon, 2011). Gender-roles are based on behaviours and are different from gender-role stereotypes.

Gender-role stereotypes are understood to be the way people believe others' should behave based on their gender. More specifically, they include beliefs about the psychological traits and characteristics of activities deemed appropriate for men or women (Brannon, 2011). In the context of the PE classroom, research suggests that many PE teachers may hold perceptions and expectations of what girls and boys are capable of doing (Lirgg, 1993; Treanor, Graber, Housner, & Wiegand, 1998). For example, male PE teachers may believe yoga is an appropriate activity for female students and female PE teachers may believe football is as an activity more appropriate for male students.

### **Title IX Legislation**

Title IX was an educational policy passed in 1972 by the US Congress. The purpose of Title IX was to guarantee that girls were provided the same educational opportunities as boys (O'Sullivan, Bush, & Gehring, 2002) which included the right to participate equally in PE and sports. No such legislation exists in Canada. Title IX is applicable to all levels of education in the US that receive federal funding and it includes preschools to post-graduate institutions (O'Sullivan et al., 2002). Title IX impacted the structure and environment of PE classes. Prior to the passage of Title IX, sex-segregated classes were common in PE. After Title IX was enacted, it was mandatory for all PE classes to be coeducational (Stauirowsky et al., 2007). However, exceptions to mandatory coeducational PE classes may still exist. For example, PE classes can be segregated by sex if the purpose of the activity involves bodily contact. These types of activities would include boxing, hockey, rugby, wrestling, football and basketball. PE classes must be coeducational where sports do not involve physical contact, such as tennis or volleyball, (O'Sullivan et al., 2002). Additionally, students may be excused from participating in coeducation classes if it conflicts with their religious beliefs. Sex-segregated PE is offered as an

alternative in such cases.

One of the justifications for the enactment of Title IX was the idea that girls and boys would have equal opportunities for instruction and practice in PE (Griffen, 1984). However, some scholars disagreed with this notion. Vertinsky (1992) argued that the adoption of coeducation PE has led to a model of PE taught from a male perspective. As such, “male standards would be the ones to emulate, reifying the values of competitive sport and further reinforcing hegemonic masculinity” (p.378). Additionally, past research suggests that gender-role stereotypes and expectations among PE teachers are more common in coeducation PE settings (Lirgg, 1993; Napper-Owen, Kovar, Ermler, & Mehrhof, 1999; Treanor, et al., 1998).

### **Research on PE Teacher Gender Beliefs**

Much literature has examined the gendered beliefs and practices of in-service PE teachers. Davis (2003) reviewed the research on gender-biased practices in teaching PE and identified seven key gendered teaching behaviours and practices of in-service PE teachers. These behaviours included: (a) higher frequency of verbal and nonverbal interactions with male students as opposed to female students (Dunbar & O’Sullivan, 1986; Macdonald, 1990; Mitchell, Bunker, Kluka, & Sullivan, 1995; Napper-Owen et al., 1999;), (b) male students questioned more often than female students (Brown, Brown, & Hussey, 1996; Dunbar & O’Sullivan, 1986), (c) male students praised for good performance and female students praised for their effort (Dunbar & O’Sullivan, 1986; Macdonald, 1990), (d) PE teachers’ use of gender-biased language in their interactions with students (Brown et al., 1996; Hutchinson, 1995; Mitchell et al., 1995; Wright & King, 1991), (e) higher expectations of skill and physical ability from male students as compared to female students (Lirgg, 1991; Lock, Minarik, & Omata, 1999; Macdonald, 1990; Treanor et al., 1998), (f) the utilization of teaching styles and strategies that reinforced gender

bias (Brown et al., 1996; Hutchison, 1995; Lock et al., 1999; McKinley, 2000; Napper-Owen, 1994) and (g) the design of lessons that disregarded the interests of female students but instead promoted traditional PE activities (Chepyator-Thomson & Ennis, 1997; Hansen, Walker, & Flom, 1995; Humberstone, 1990; Lock et al., 1999; Mitchell et al., 1995; Napper-Owen et al., 1999). Conversely, the work of McBride (1990), which examined the gender-role stereotyping behaviours of six PE teachers, was one of the few studies to imply that students were not treated differently by gender.

Although much of the literature reports that PE teachers displayed gender-biased practices, there is evidence to suggest that PE teachers can be successful at changing these behaviors if they desire to create gender equitable learning environments (Staurowsky et al., 2007). Studies have shown that PE teachers, who avoided references to the superiority or inferiority of gender and encouraged students to view performance as byproduct of work and effort, positively affected how students view possibilities in PE settings for themselves and others (Chepyator-Thomson, You, & Hardin, 2000; Li, Harrison, & Solomon, 2004). Additionally, Staurowsky and colleagues (2007) have identified culture change, class management and an alteration in teaching style to help foster gender equity in PE classes. First, they argued for a change in the culture of the classroom. They suggested PE educators should avoid using gender biased language and terminology (e.g. “you guys”) and modify activity terms (e.g. player-to-player defense rather than man-to man). Next, they identified class management to help promote gender equity by encouraging PE teachers to (a) place students in groups by ability and not gender and (b) make references to high profile female athletes and male athletes during PE instruction. Finally, an altered teaching style was recommended. PE teachers were advised to lessen the importance on winning and competition and to include more cooperative

games into their PE curriculum (Staurowsky et al., 2007).

### **Quantitative and Qualitative Methodologies in PETE Research**

Galluzzo and Craig (1990) described four main purposes to conduct teacher education research and assessment: (1) *accountability*: to meet external accreditation review standards, (2) *improvement*: to gather and use data for making program revision/improvement decisions, (3) *understanding*: to understand the experiences of pre-service teachers in programs and (4) *knowledge*: to increase the existing body of knowledge on teacher education to make generalizations. More specifically, the overarching purpose was to engage in teacher education research and develop “a comprehensive knowledge-production effort about the relationships among a program’s context, inputs, processes and products” (Galluzzo & Craig, 1990, p.606).

The majority of the knowledge related to the effectiveness of teacher education programs has been derived from limited studies of specific program components (Ducharme & Ducharme, 1996). This information is typically gathered in one of two ways. In the first approach, researchers attempt to relate some component of a teacher education program (e.g. a student teaching field experience) towards pre-service teachers’ perceptions and its impact on their development as teachers. In the second approach, scholars learn about teacher education students in their program as participants for research (Metzler & Tjeerdsma, 2000). A description of the main quantitative and qualitative data collection techniques in PETE research follows.

### **Quantitative Data Collection Techniques in PETE**

A description of common quantitative data collection techniques used in PETE research are presented and include: (a) tests, (b) questionnaires, and (c) quantitative participant observations.



**Tests.** Formal tests can be used to measure achievement, assess individual ability, observe behaviour, and/or develop a psychological profile of an individual in PETE research (McMillan, 2012). Examples of tests used in PETE research include: (a) achievement tests that measure how well an individual mastered some particular knowledge or skill, (b) aptitude tests or ability tests that measure how well an individual is likely to perform on some particular dimension of ability, (c) attitudinal tests that measure an individual's beliefs, attitudes, or feelings about a specific topic and (d) personality tests that measure one or more dimensions of personality or a tendency to act in similar ways over time and across situations (Springer, 2010).

**Questionnaires.** Quantitative questionnaires typically include standardized closed-ended items (Johnson & Christensen, 2012). For example, a PETE student may be asked, on a Likert scale, how important is planning when teaching PE? (e.g. Very important, important, moderately important, of little importance, unimportant). The purpose of using questionnaires in quantitative studies is to corroborate research results for which specific variables are being measured and research hypothesis are being tested (Johnson & Christensen, 2012). Questionnaires can assess various participant traits such as attitudes, values and interests towards a particular topic or statement.

**Participant observations.** The use of participant observations in quantitative research requires the standardization of all observation procedures. For example, this would include: who is observed (e.g. teachers or students), what is observed (e.g. observational variables such as time on task or the frequency of feedback), when the observations are to take place (e.g. during the morning, recess, afternoon), where the observations are to be carried out (e.g. in the gym or on the schoolyard), and how the observations are being conducted (e.g. training of observers) (Johnson & Christensen, 2012). Quantitative observations typically result in data in the form of

counts, frequencies or percentages. For example, an observer may record how often a male PETE student provides feedback to female students during a PE lesson.

### **Qualitative Data Collection Techniques in PETE**

The following common qualitative data collection techniques used in PETE research are presented: (a) interviews, (b) focus group interviews, (c) participant observation, (d) simulated recall, (e) document analysis, (f) open-ended questionnaires and (g) critical incident.

**Interviews.** The purpose of conducting interviews is to gain an understanding of individual beliefs or perspectives regarding a specific topic or life experience (Byra & Goc Karp, 2000). For example, a PETE student may be interviewed about personal views towards teaching students with disabilities in PE. An interview can be described as a purposeful conversation that occurs between two or more people. Interviews can follow structured, semi-structured or unstructured formats. Structured interviews are used in order to compare data across a set of participants. While semi-structured or unstructured interviews consist of open-ended questions, they are used to obtain in-depth information about a participant's thoughts, beliefs, knowledge, reasoning, motivations and feeling about the experiential topic in question (Johnson & Christensen, 2012).

**Focus group interviews.** Focus group interviews have the power to capture group dynamics and increase the focus and depth of participant discussions (Frontana & Frey, 2000). Focus group interviews are used to gather insights from specific groups of people (e.g. female PETE students) regarding their perceptions, beliefs and language (Johnson & Christensen, 2012). Furthermore, focus group interviews aid in the development of hypotheses and identify perceptions, misconceptions and attitudes towards a topic of interest (Byra & Goc Karp, 2000). Morgan (1997) listed six reasons to use group interviews. They should be used when: (1) group

interaction will foster more in depth responses, (2) there is potential for new insights, (3) group pressure challenges exist, (4) opposing views can be highlighted through discussion, (5) the topic of discussion will not prevent others to withhold information, and (6) an evocative interview guide can be created.

**Participant observation.** The researcher observes all relevant phenomena and takes extensive field notes in qualitative participant observation. The observer may either participate or observe participants in activities or situations (Spradley, 1980). Participant observation is primarily used for exploratory purposes for observations to occur in natural settings (Angrosino & Mays de Pérez, 2000). Spradley (1980) identified five types of participation which occur with participant observation: (1) non-participant: the participant observer has no association with the people or topic being investigated, (2) passive: the participant observer is present in the research environment but maintains little interaction with people, (3) moderate: the participant observer attempts to maintain a balance between participation and observation, (4) active: the participant observer is involved with the people and environment being studied and (5) complete: the participant observer maintains dual roles as both a participant and observer.

**Stimulated recall.** The use of stimulated recall in PETE research allows for the study of PETE students' thoughts during a skill or teaching performance (Byra & Goc Karp, 2000). Interactions in the gymnasium are captured on video or audiotape and stored until the teaching or skill performance is over. Afterwards, the PETE student thinks aloud while she or he reviews their recorded performance. This technique allows for documentation of both verbal and non-verbal thought processes regarding a confined teaching event (Shavelson, Webb, & Burstein, 1986). Stimulated recall assumes participants are able to remember and verbalize their thoughts in a complete and accurate manner (Byra & Goc Karp, 2000).

**Document analysis.** Documents are used to help corroborate other forms of data collected (e.g. participant observations or interviews). It is rare for documents to be used as primary sources of data in PETE research. Rather documents are more commonly used as a method to confirm or support PETE student actions or thoughts. For example, documents analyzed in past qualitative PETE research have included: (a) journals, (b) lesson plans, (c) unit plans, (d) curriculum guides, (e) program handbooks, (f) course syllabi, (g) course handouts, (h) written tests, and (j) student notes (Byra & Goc Karp, 2000).

**Open-ended questionnaires.** Open-ended questionnaires can solicit PETE students' thoughts about topics or issues associated to schooling or teaching (e.g., beliefs about assessment and implementation in PE). They are mainly used as a tool to confirm or negate interpretations made from collected interview or observational data (Byra & Goc Karp, 2000). Open-ended questionnaires are not to be confused with open-ended questions asked during interviews. Open-ended questionnaires consist of questions where responses are in the form of written answers.

**Critical incident.** The critical incident technique collects behavioural information from a specific teaching or learning situation. Critical incidents can be recorded in verbal or written formats (Flanagan, 1954, as cited in Byra & Goc Karp, 2000). For example, a PETE student reports about a recent factual teaching incident (e.g. explain a specific incident from teaching that they felt was successful) and then would describe the setting in which the incident took place, when it occurred, what happened, and why they felt it was a successful (Byra, 1991).

### **Selection of Case Study Design**

Qualitative case studies are commonly utilized in various areas of education (Merriam, 1998). For example, case studies in education have been used to examine students, schools, teachers and policies. Yin (2009) defined a case study as being “an empirical inquiry that

investigates a contemporary phenomenon (i.e. the case) within its real life context” (p.13).

Qualitative case studies in education are also categorized based on their disciplinary orientation or function. For example, the intent of a case study can be to describe, interpret or evaluate a particular phenomenon or to build theory (Merriam, 1998). While different terms may describe research that involves more than one case (e.g., collective case studies, cross-case studies or multicase studies; Merriam, 1998), multiple instrumental cases were explored in this study. An instrumental collective case study design was employed because it can examine a person, specific group, occupation or department as a means to provide insight into a particular issue or situation (Grandy, 2010). Thus, qualitative case studies were utilized to gain insight and make interpretations towards a particular area of interest (Merriam, 1998). In many instances, case studies are often selected “because of the direct accessibility, convenience and the straightforwardness with which data that are pertinent to the research question can be collected” (Armour & Griffiths, 2012, p. 209). For example, the rationale for selecting a case study design for this study was the belief that the research question could be answered by an accessible and convenience sample at the university.

Many forms of data collection can be used in case studies and it includes participant observations, documents and interviews in qualitative case studies (Armour & Griffiths, 2012). Interviewing is typically the most common form of data collection in qualitative studies in education and in many instances, is the only source of data collected (Merriam, 1998). Thus, interviews were conducted because thick and rich descriptions could be provided for the cases being explored (Grandy, 2010). However, as recommended by Yin (2009), additional sources of data were also collected in order to enhance the rigor, credibility and usefulness of this qualitative case study. Grandy (2010) suggested that a case study could be a combination of an

intrinsic and instrumental design where intrinsic cases tend to be exploratory in nature. Thus, the researcher was guided by his intrinsic interest in the case itself and he decided to explore PETE students' beliefs about female and male participation in elementary and high school PE.

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February, 2015

To Whom It May Concern:

The purpose of this contribution letter is to confirm that the co-author (William Harvey) and the candidate (Michael Cicchillitti) are in agreement that the manuscript, entitled *Perceptions of PETE Students about Boys' and Girls' Participation in Elementary and High School Physical Education*, be placed in the candidate's Master's thesis. The candidate's roles in this study included collecting and organizing the data, performing a qualitative analysis of the data, writing the manuscript under the guidance of the co-author and making modifications to the document in response to the co-author's comments.

I, the candidate, acknowledge the aforementioned roles and the co-author's (William Harvey) contributions to the manuscript entitled *Perceptions of PETE Students about Boys' and Girls' Participation in Elementary and High School Physical Education*.

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Michael Cicchillitti

I, the co-author, agree that the candidate, Michael Cicchillitti, include the manuscript, entitled *Perceptions of PETE Students about Boys' and Girls' Participation in Elementary and High School Physical Education*, in his Master's thesis.

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William Harvey

Perceptions of PETE Students about Boys' and Girls' Participation in Elementary and High  
School Physical Education

(May, 2015)



## Perceptions of PETE Students about Boys' and Girls' Participation in Elementary and High School Physical Education

Physical education (PE) in school can play a significant role in increasing physical activity (PA) levels for young people (Pate et al., 2007). PE curricula and programs have focused on physical fitness, the encouragement of lifetime PA and promotion of health in childhood and later in adult life (Harris, 2000; Zeigler, 1999). However, studies have suggested that girls are less likely to participate in sport and PA when compared to boys (Eccles & Harold, 1991; Fredricks & Eccles, 2002; Hartmann-Tews & Pfister, 2003). Moreover, scholars have argued that PE is a subject that remains male dominated (Hargreaves, 1994; Scraton, Fasting, Pfister, & Bunuel, 1999), with gender inequality and exclusionary practices seemingly common within the structure of the profession (Evans & Penny, 2002; Rich, 2004). Hence, it is important to understand how to include more people in PE in order to obtain the beneficial effects of PA.

Unfortunately, studies on gender issues have found PE and sport settings to be contexts where gender-roles are reinforced (Vertinsky, 1992; Williamson, 1996; Kirk, 2003) and gender-based discriminatory practices are common (Siedentop & Tannehill, 2000). Chalabaev, Sarrazin, Trouilloud and Jussim (2009) suggested that inequalities in the instruction of male and female students may arise when gender-roles are reinforced in PE settings. These stereotypes may also affect PE teachers' views on what students are able to accomplish in PE. For example, PE teachers may believe that dance is an appropriate activity for female students and outdoor education is an activity more suitable for male students.

Evans and Penny (2002) suggested that teacher educators have been slow in addressing the body of evidence that confirms the gender-biased behaviours and beliefs of PE teachers. As such, many scholars contended that teacher beliefs should become a main focus of educational inquiry (Graber, 1995; Graham, Hohn, Werner, & Woods, 1993; Hutchinson, 1993; Kulinna,

Silverman, & Keating, 2000; Placek et al., 1995; Woods & Langley, 1998) because these beliefs are one of the most important concepts in teaching and teacher education (Calderhead, 1996; Pajares, 1992). Pajares (1992) further noted the importance of teacher educator awareness about pre-service teacher beliefs prior to the start of a teacher education program and during the actual years spent in a teacher education program. For instance, physical education teacher education (PETE) student beliefs may influence contemporary views towards PETE and future teaching practices as in-service teachers (Curtner-Smith, 2001; Matanin & Collier, 2003; Siedentop & Tannehill, 2000).

One of the major theoretical frameworks to guide research in the formation of PE teacher beliefs has been occupational socialization (see Curtner-Smith, 2001, 2009; Lawson, 1983a,b, 1986, 1988, 1989, 1991; Schempp & Graber, 1992; Stroot, 1993; Templin & Schempp, 1989). The literature in the occupational socialization of educators has primarily focused on PE teachers (Brown, 2012). Occupational socialization has been defined as “all kinds of socialization that initially influence persons to enter the field of physical education and later are responsible for their perceptions and actions as teacher educators and teachers” (Lawson, 1988, p.267).

Potential gender-biased behaviour amongst PETE students has been examined previously through the theory of occupational socialization in two main studies (Chen & Curtner-Smith, 2013; Parker & Curtner-Smith, 2012). These studies were part of an investigation about PETE student learning and delivery of the sport education (SE) curriculum model. The SE model had been criticized for its ability to avoid gender-based discriminatory practices when delivered by the teacher (Chen & Curtner-Smith, 2013; Parker & Curtner-Smith, 2012; Penney, Clarke, Quill, & Kinchin, 2002). Chen and Curtner-Smith (2013) suggested that female and male PETE students with an orientation towards coaching (i.e. entered PETE with a primary desire to coach

sports teams) displayed sexist behaviours and a masculine bias when teaching the SE model to high school students. Conversely, female and male PETE students with an orientation towards teaching (i.e. entered PETE with a primary desire to teach PE as their primary job function) did not exhibit any sexist or masculine-biased behaviours when teaching the SE model to elementary school students (Parker & Curtner-Smith, 2012).

Current research, that investigates the gender-biased beliefs and behaviours of PETE students, has only been examined within the scope of the SE model. Thus, more research that explores gendered beliefs about PE from a PETE student perspective is warranted to fill this gap in the literature. While Rich (2004) suggested further examination of PE teacher perceptions about the non-participation of girls in PE, the investigation of pre-service PE teacher perceptions about the non-participation of girls and boys in PE may also lead to a better understanding of this gendered phenomenon.

Therefore, there were two purposes for this study. First, this study investigated the perceptions of female and male PETE students about the reasons why girls and boys do or do not participate in elementary and high school PE. Second, this study attempted to identify any gender-biased beliefs held by male and female PETE students about the participation and non-participation of boys and girls in PE. The following research questions guided this study. How is the participation of boys and girls in PE perceived by female and male PETE students? What types of gender-biased beliefs do male and female PETE students hold about participation in PE?

### **Method**

This qualitative study followed an instrumental collective case study design in which data were collected for female and male PETE student cases respectively. The purpose of an instrumental case study is to provide insight and understanding of a particular phenomenon or

situation (Baxter & Jack, 2008). It is important that the case is bound and the unit of analysis be identified when conducting a case study (Yin, 2009). Therefore, for the purposes of this study, two cases were defined as the perceptions of third and fourth year (a) female and (b) male PETE student teachers about elementary and high school student participation in PE.

### **Participants**

The study's participants were 12 students (six females, six males) from a PETE program located in Eastern Canada (see Table 3, Appendix C). They were selected using a purposeful sampling approach where the principal investigator (PI) was able to seek out information-rich cases for the study (Grandy, 2010; Patton, 2002). Two main inclusion criteria were developed for the study. First, each participant had to be registered in the third or fourth year of the PETE program. Next, each participant had to have successfully completed the following field experiences: (a) three weeks - elementary, (b) three weeks - high school and (c) seven weeks - elementary or high school. The selection criteria allowed for a sample of participants rich with experiences in student teaching (ST) and PETE courses. Additionally, the study participants were PETE students with different teaching experiences, life experiences and athletic backgrounds. Therefore, participant profiles were created in order to describe the backgrounds of each individual (See Appendix D).

### **Data Gathering**

Ethics approval was obtained before any data were gathered. Consent forms were signed by all of the participants who met the selection criteria. No data were gathered before ethics approval or informed consent were obtained. The recommendations of Yin (2009) were followed for conducting case study research. Multiple sources of data were collected to enhance the rigor, credibility and usefulness of this study. The advantage of using multiple sources of data is the

ability to develop converging lines of inquiry for which data can corroborate similar facts or phenomena that arise in the research (Yin, 2009). Data gathering included a demographic questionnaire, a semi-structured interview, a PETE course checklist, and personal artifacts.

**Demographic questionnaire.** Each participant completed a questionnaire to gather demographic information (e.g., sex, race, date & city of birth, current grade point average) and document individual sport participation at four levels of education: (1) elementary school, (2) high school, (3) collège d'enseignement général et professionnel (CEGEP) and (4) university (see Appendix E). This information was used to help in the creation of each participant's profile.

**Interview.** A semi-structured interview, with open-ended questions, was conducted with each participant in a private research office located at the university. All interviews were audio recorded and transcribed verbatim. The use of a semi-structured interview approach enabled participants to explore their thoughts and feelings without being limited to answering closed questions (Creswell, 2007).

An interview guide was created by a committee that included the PI and three university professors with extensive experience in qualitative interviewing (see Appendix F). It consisted of 25 questions that covered the phases of acculturation and professional socialization from the theory of occupational socialization in an attempt to address PETE student beliefs about participation and non-participation of boys and girls in PE. It also served to explore various types of gender-biased beliefs that male and female PETE students held about participation in PE. The interview script from Lee (2010) was also used to help create this study's interview guide (questions 2, 3, 4c, 5c, 6, 9, 10, 11, 20, 21) because it utilized the theory of occupational socialization that had been previously used to gain the perspectives of sport pedagogy doctoral students.

The first 11 interview guide questions addressed the acculturation phase of occupational socialization (e.g., “So tell me a little about your decision to study physical education” “What were your experiences like as a student in elementary physical education class?”). The pre-service teachers’ perceptions concerning the participation of children in elementary school PE were addressed through questions 12-15. Two questions examined the participants’ perceptions about the activities and sports that boys and girls enjoy participating in at the elementary school level (e.g. “What activities or sports do you think boys enjoy participating in during elementary school? Why?”). Questions 14 and 15 addressed individuals’ perceptions related to the enjoyment or non-enjoyment of PE of boys and girls at the elementary school level. The pre-service teachers’ perceptions concerning the participation of adolescents in high school PE were addressed through questions 16-19. Each participant was asked the same questions for elementary school experiences (e.g., Questions 12, 13, 14,15) but they were rephrased to target the high school level.

Questions 20-25 addressed the professional socialization phase of the occupational socialization framework. First, participants were asked to describe the teacher educators who taught them to perform PE instruction during their PETE program. They were then asked about the courses they have completed in the PETE program. Next, they were asked how these courses might have influenced their teaching actions with females and males in PE at the elementary and high school levels. Each participant was also asked to reflect on any courses that addressed gender and gender-role stereotypes in general education, PE and/or sports. The concluding interview question encouraged each participant to provide any comments, questions, or concerns about the interview.

**PETE Course Checklist.** The PETE course checklist (see Appendix G) served two purposes. First, each participant completed a PETE program course checklist to describe which courses that she or he had successfully completed to date. This information was separated into three sections: required courses (see Table 4, Appendix H), required and elective skill courses (see Table 5, Appendix I) and elective courses (see Table 6, Appendix J). It identified similarities and differences in courses taken among the participants. The checklist included a list of all of the required courses to complete a Bachelor of Education in Physical and Health Education at the university. The checklist information was retrieved from the university's academic program profile (2007-2013). Each participant was asked to bring her or his own unofficial university transcript as a reference to indicate completed course work. Second, the checklist was used during the interview process to help participants recall memories from prior PETE courses. For example, each participant was shown the completed checklist to help stimulate responses when asked about courses that discussed issues of gender and/or gender stereotypes in PE.

**Personal Artifacts.** Previous ST field experience logbooks were used as personal artifacts for this study. Each participant had already created a teaching logbook when they engaged in each of their annual university ST field experiences. These logbooks documented important aspects of ST experiences that included unit plans, lesson plans and personal reflections about prior teaching experiences. The logbooks were not collected as data but rather they were used to help participants in the recall of their ST memories during the interview process. Each participant was asked to perform two specific actions to facilitate this recall process. First, each participant was asked to review field experience logbooks approximately 48 hours prior to the scheduled interview date. Next, each participant was asked to bring the most recent field experience logbook on the day of the interview.

## **Data Analysis**

Within and cross-case analyses were performed to answer the research questions and examine the similarities and differences across the female and male cases in this study. For example, the data were analyzed separately for each case and then compared across cases. All interview data were coded using Nvivo 10 qualitative research software.

**Interviews.** All participant interviews were transcribed verbatim. The interview data were coded and a thematic analysis ensued (Braun & Clarke, 2006). First, all transcripts were read a few times to better familiarize the PI with the content of the interview data. Next, initial codes were generated from meaningful words, sentences or phrases. The title of each code was developed from words that reflected the essence of participants' experiences. Third, a search for sub-themes and themes ensued. Similar codes were combined to represent broader level categories or sub-themes. Fourth, these categories were then reviewed and next, they were re-organized to form larger, representative themes. The sixth and final step of the thematic analysis was the production of the report where compelling extracts were selected to best represent the study's themes and sub-themes (Braun & Clarke, 2006).

## **Trustworthiness**

The establishment of trustworthiness is essential during qualitative research to ensure that the research process was conducted with rigor so the findings may be considered as credible (Creswell, 2007). Training in qualitative methods, pilot work, and researcher reflexivity were employed to establish trustworthiness in this study. First, the PI received formal training in qualitative research methods (Maxwell, 2013; Patton, 2002). Next, pilot interviews were conducted to refine and modify the interview questions in order to maximize its effectiveness (Creswell, 2007). Thus, the PI was able to practice and develop his interview skills. Finally,



researcher reflexivity was used for the PI to be aware of his life experiences and underlying assumptions as they may have influenced the interpretations and results of the study. For example, the PI previously graduated from the same PETE program as the study participants. The PI was also a former teaching assistant for PE pedagogy courses taken by the participants. Thus, some of the participants were familiar with the PI prior to involvement in this study. The PI had further worked as a PETE field experience supervisor. However, none of the study participants were ever supervised directly by the PI. Researcher reflexivity can be also enhanced through regular discussions of data collection procedures and interpretations by the research team (Forman, Creswell, Damschroder, Kowalski, & Krien, 2008). Therefore, the PI met with a critical friend on a bi-weekly basis during the final phases of the study's completion (Sparkes & Smith, 2014). The critical friend, a university professor trained in mixed methods research, discussed the data collection procedures and challenged interpretations made by the PI. These discussions helped to focus and bracket the PI's assumptions.

## **Results**

The overall time for interviews was 14 hours. A total of 256 pages of text were produced as a result of the transcription process. Interview data were analyzed separately for female and male cases. Thirteen sub-themes were created from the analysis that, in turn, formed four overarching themes: *(a) PE participation*, *(b) PE activity preferences*, *(c) Experiences before PETE*, and *(d) Experiences during PETE*. The results of the female case will be discussed first, followed by the male case for each of the sub-themes presented. A decision was made to perform cross-case analyses on the first two themes to address the two central research questions. Information about occupational socialization emerged during themes three and four but there was

much overlap in the analyses so the cross-case analyses were dropped. All participant names were replaced with pseudonyms.

## **PE Participation**

The *PE participation* theme referred to participants' rationale for boys' and girls' participation in PE. The *girls' elementary school PE participation*, *boys' elementary school PE participation*, *girls' high school PE participation* and *boy's high school PE participation* sub-themes were created. A cross-case analysis of the results from the PE participation theme is presented in Table 7, Appendix K.

**Girls' elementary school PE participation.** The first sub-theme was labeled *girls' elementary school PE participation* because it included statements about why girls do or do not like to participate in elementary school physical education (ESPE).

***Reasons for girls' participation in EPSE.*** The female PETE students discussed the opportunity to be active and a change of environment as reasons for girls' ESPE participation.

They still really like being active in elementary school. It's playtime. I know they always saw phys ed. as their free time, like they loved that it was something to motivate them. It was their time to let out their energy. (Laura)

I think the reason why they enjoy it so much is cause it's a class away from where they can just give their mind a break and go and run and spend some energy. I'm sure everyone enjoys that you know, on days where you have to sit on your bum all the time. (Lisa)

The male PETE students believed girls' participated in EPSE because it provided the opportunity to be active, socialize with friends and offered a break from the classroom.

Because they like to move, a kid is a kid ... Cause I've also taught at [name of school] for my third field experience. It's an all girls school and as soon as they feel that they're not being judged, by like for example, boys in the class that are like 'oh, boys are better than girls', they'll automatically like it because it's their opportunity to move and have fun with their friends. This is pretty much why they like phys ed. (Jason)

So since they want to have some aspect of positivity into it, so if they're not getting the fun aspect out of playing sports, then they're gonna get the fun aspect out of being with their friends. So while they're on the bench or on the sidelines, they're gonna talk to their friends and be with them and they like that. Whereas boys they want to get in, they want to play, and that's where their fun comes from. (Joey)

In elementary school, I guess just for the same reason as everyone else, it gives you a chance to break away from just sitting down and listening to actually getting around and moving and you know doing something fun. (Neil)

***Reasons for girls' non-participation in EPSE.*** The female PETE students discussed poor skill, low self-esteem and a concern for physical appearance as barriers to girls' participation in ESPE.

I think maybe it could be due to the lack of skills. If they're missing those basic skills, then it's hard for them. They'd feel like they're gonna be made fun of maybe or it's not enjoyable, the game anymore. Yeah, I think that's the main reason I've seen for girls. If they're missing those skills it's hard for them. (Laura)

I always think it's more of a self-esteem thing. If they're not comfortable enough to be good at something and showing other people that they are not good at it. It's definitely self-esteem. I think it's an issue with not being comfortable with themselves enough to either be vulnerable enough to show that they're not good at it. Or just not being comfortable overall doing the skills and thus not wanting to do the activity. (Lisa)

Well some girls ... what I see is that they don't like to sweat. They care too much about their physical appearance, body. They don't want to move their hair. It has to do more with some of the girls. (Catherine)

The male PETE students felt that a lack of accomplishment, the challenges of coeducational classes and poor skill were factors for girls' non-participation in ESPE.

If the accomplishment isn't there, if they don't feel like they can achieve, they don't feel like they can, that their participation isn't necessary. If it's not as gratifying as it would be from doing well on the test from another subject then they might not want to be too involved. They might withhold their involvement in any activities because of the lack of accomplishment, the lack of feeling, the lack of feeling positive towards phys ed. (Matt)

Um, the boys I think is a big factor. I feel like if it's a girls' class then people are more likely to be involved. Whereas if the guys are playing and they [girls] never get the ball and they know they're not that great and they just basically stand there because they feel useless in the game. (Marty)

I think it's too difficult for them in terms of the skills that are being taught, the knowledge and the vocabulary that is being presented. Although a lot of them will know what to do but when it comes time to do it, they don't know. So I would teach tchoukball, all the girls know the rules but when it comes down to playing it, they get the ball and they have no idea what to do. (Joey)

**Boys' elementary school PE participation.** The second property of the *PE participation* theme was called *boys' elementary school PE participation* because it referred to any statements about why boys do or do not like to participate in ESPE.

***Reasons for boys' participation in EPSE.*** The female PETE students discussed the concepts of expending energy, socializing with friends and competition as reasons for boys' participation in ESPE. "I think the guys like it. It's a good outlet for a lot of their energy and sitting all day. It's a good way to get out all of the energy they have" (Laura). "I guess it's the whole like, they almost see phys ed. as like recess kind of thing I find. Even if it's more structured and everything they're still... like they can talk to their friends, they can play with their friends" (Meghan). "Boys are just automatically competitive. They're always like looking to outdo each other. 'Oh you jumped that far, I can jump farther' you know stuff like that" (Lorraine). Laura noted that both boys and girls like competition, but it was more noticeable with boys, "I think they like the competition too and a lot of the girls like that competition too but I probably notice that less maybe in the girls than I did with the guys".

The male PETE students believed ESPE provided an opportunity for boys to expend energy, a sense of accomplishment and success, with the sex of the PE teacher noted as being important. "I think they like being active at that age for both boys and girls though" (Marty).

It gives that sense of accomplishment. If you do something well in class they can, boys can definitely feel that, oh I did something, something to talk about, something to bring home as opposed to if they don't feel like they can do it. I feel some boys even if they don't feel like they can accomplish something, they will start to participate because of the the energy expenditure, the social aspect, the fun aspect. (Matt)

I find there's more of a, I guess a want to be there when they phys ed. teacher is a male. Because they [boys] often, from what I've seen and remember, they look up to them. They think that he's [the physical education teacher] pretty much good at every sport at that age... so everybody looks up to them, especially for the boys when it's a guy. But then again, when there was a girl phys ed. teacher I find it's the reverse. I find that the girls look more up to the teacher, but when it's a male, I find the boys look up to the teacher. (James)

***Reasons for boys' non-participation in EPSE.*** The female PETE students spoke about poor skill and ridicule as potential reasons for why some boys do not like to participate in ESPE.

Some of the boys that didn't participate as much didn't have some of the basic skills. I know because there was a few that really didn't like it. They have trouble catching balls or throwing balls and they were in grade 5 or 6. (Laura)

I think some boys, just don't feel comfortable enough with themselves either because they lack the skills, the coordination or because they just, maybe they just don't like sports and that's okay you know. But because of everyone else around them, especially the boys I'd say, that are so much more inclined to want to play sports all the time, then they can even be made fun of. Which automatically, like things just start to become negative in their minds. (Lisa)

The male PETE students noted a lack of skill and bullying as reasons for boys' non-participation.

I guess like the same reason as the girls, if you don't have the proper skill for it. Maybe the class is not structured in a way that's friendly towards the less skilled students. It might make you want to stop participating all together. (Neil)

Boys they tend to be like always trying to compare to each other, like in a competitive aspect, 'oh you can't do this, you suck'. So sometimes they will try to do team sports and it would be like, they won't pass the ball to a certain person. Some students they can get picked on for this. (Jason)

***Girls' high school PE participation.*** The third property was named *girls' high school PE participation* because it included statements about why girls do or do not like to participate in high school physical education (HSPE).

***Reasons for girls' participation in HSPE.*** The female PETE students discussed an interest in sport, competition, socializing with friends and a break from the classroom as reasons

for girls' HSPE participation. "I think there's a lot of girls too that like the competition. Well, what I've noticed, they like to show they've increased or done better, like see that improvement, that's big seeing that improvement" (Laura).

Well again, they're always gonna be those girls who are gonna enjoy it [physical education] ... you know, like I was one of them. You're not necessarily a tomboy. I don't want to put a name to it but I mean there are girls who actually just enjoy sports and that's fine. They want to be there because they do enjoy maybe that competitive drive that the boys have as well. They are skilled at a sport so they want to be able to like show it off or show them [boys], 'look I can do this'. (Lisa)

I think girls take the time to socialize in that hour, which they enjoy. What I've noticed is that in class, cell phones are more regulated but in the gym they tend to bring them in, put them on the bench and take a look at them whenever they feel. I've seen that and I think they just take that as a socializing hour. 'Miss I don't feel well I have cramps, I'll just stay here and then they're five of them, 'I don't feel well'. (Jackie)

Getting out of the class, even for those girls who maybe don't like playing the sports or activities. It's the same idea even for those ones who are sitting on the side. They're like 'oh god we gotta go to gym' but it's also kind of nice to sit out and not have to go to math or something like that. It's like a little break, a free break. (Lorraine)

The male PETE students felt that the ability to socialize with friends, the possession of a sport background and a focus on body image were perceived factors for girls' participation in HSPE.

It can provide a social environment...you can talk, you have the opportunity to, in a warm up you know socialize. I guess a good word to use is decompress. They can just let some things go. Some things that can be frustrating and go talk and whatever and that's what phys ed. gives, is that environment of possible chaos, but they can maintain what they need, what they want. (Matt)

Then there's the ones that are athletes and they like sports and grew up playing sports throughout elementary school and they're usually the ones who still enjoy phys. ed., just because they like the competitive aspect of sports and engaging in physical activity. (Marty)

I think girls like physical education because of the health aspect. I believe that, especially in high school girls have a better sense of adopting a physically active lifestyle because they want to run and be in shape. They want to run to feel good but this is also from the media and other influences like, 'girls have to be skinny, girls have to be fit' and when you're in high school you're really impressionable to those things like, 'ah I want to look

good, how do I look good? I run, okay I want to run'. Well boys don't really care about that so much, some do like, 'oh, I want to be muscular, I'm gonna go to the gym'. So it's really the influence of society and the culture that I find makes them physically active. Girls I find they are more adopting of competency 3 [health component of the Quebec physical education curriculum] than the boys. (Joey)

***Reasons for girls' non-participation in HSPE.*** The female PETE students felt that concerns for sweating and time for preparing physical appearance limited girls' participation in HSPE.

That class, cause it was single sex phys ed. class, but it was coeducational the rest of school so like afterwards they had to go. They only had a few minutes to go get changed. A lot of them would try to do their makeup or like get dressed and I guess if they sweat it would take them more time to get ready before class and they were going to be seeing boys and they wanted to look nice. I guess if they're all sweaty they didn't want to like, but a lot of the guys didn't really care about being sweaty. They would smell for the rest of the day and they were just like, they didn't care. I'd have to remind them to put deodorant on. (Laura)

However, some of the female PETE students felt that girls' HSPE participation could be increased if additional time was provided to shower and prepare for subsequent classes.

If you're like, 'oh if you work hard for the next while then I'll give you a bit of extra time to shower or get changed'. Even though the class would be shorter, maybe for that amount that they were in they would try harder because they know they're gonna have the time to like get changed and shower and like look good for the next class. It could be a motivator to work harder for that time they're in class. (Laura)

The male PETE students spoke about girls' concern for sweating, their appearance to others when engaged in HPSE and negative effects of competition on their HSPE participation.

Yeah, they don't want to sweat. I think they hate sweating. It ruins their hair, makeup, stuff like that... cause they work hard to look good when they come to school and then when they go to phys ed., if they sweat a lot, they kind of have to do it all over again and if they even can in the high school bathroom. (Neil)

The whole concept of sweating is something that kind of coincides with the whole concept of image for them. Because if they put a lot of work into their image, you know them participating in a lot of activities, it could change and they might not look a certain way that they want to. If so, they can't look a certain way, then they might not want to have that change happen. For example if their hair gets messed up because you go outside

and it's a really windy day and they're not happy with that they might just say, 'I can't participate today'. (Matt)

The level of competitiveness I mean, guys just want to win, they'll be physical, it's all about who's good and who's bad which I think the girls stop. It's not fun, which is I think is the biggest aspect of all so there's not fun for them and they don't wanna participate, they don't want to sweat, they don't want to get involved, it's just not seen as a girl thing to do at that age. (James)

**Boys' high school PE participation.** The fourth property of the *PE participation* theme was called *boys' high school PE participation* because it referred to any statements about why boys do or do not like to participate in HSPE.

***Reasons for boys' participation in HSPE.*** The female PETE noted competition and leaving the classroom environment as motives for boys' participation in HPSE. "I think again it's a good outlet for them, a lot of them I think they like participating in activities so they, like sports and for the ones that are competitive it's a good, like they enjoy that" (Laura). "I don't know. It's like you're getting out of the classroom. It's one period where you don't have to sit there and listen to the teacher drone on" (Lorraine).

The male PETE students spoke about the concepts of competition, being active and the opportunity to leave the classroom environment as potential reasons for boys' HSPE participation. "Competitive aspect is a major thing I think" (Marty). "Competition, ability to show your skills, feel apart of the team" (Neil).

I think of it like, because they like to be active. I just find boys more active. You go to a high school lunch hour, who's running around? Who's playing soccer? Not the girls. But I just think boys like to be more active, it's just again, it's a learnt behaviour. (Joey)

Sometimes like it happens a lot of time boys, they're not interested in classroom stuff, especially boys that are struggling at school, in public school settings. If they have bad marks in class subjects, for example English, French, they'll be able to go to physical education and change their minds and just have fun. (Jason)



***Reasons for boys' non-participation in HSPE.*** The female PETE students noted poor athletic ability, public failure linked to poor skills, sexual stereotypes and lack of interest in the PE curriculum as potential reasons for boys' non-participation. "There's guys who may not be as naturally athletic. They don't want to embarrass themselves or be made fun of or maybe they're just not athletes. They don't enjoy sports and they enjoy other things" (Lorraine).

Well if they see all of the other guys that are super good at stuff and they know that they can't do it, they're not. That's the other thing about phys ed., if you're bad in math no one is going to know it, but phys ed. everyone sees it and some people are even gonna like yell at you about it or be mean about it so everyone sees that you can't shoot. (Meghan)

From my experiences, like it was definitely some boys being called gay, because you know the way they acted or whatnot and then they didn't want to participate and be part of what the rest of the boys were doing because maybe they did lack the skill. (Lisa)

Some might be more academic. I think in high school you start sort of seeing where you're going, if you're more academic, if you enjoy music more, if you're enjoying drama, you know if you wanna do you know science club. You're distinguishing yourself a bit more and some of them just might not associate part of themselves with the gymnasium or sports. (Jackie)

The male PETE students spoke about poor athletic skills, a lack of accomplishment and little interest in the PE curriculum as potential reasons for boys' non-participation. "If they're not good at physical education, it's like 'oh not again, it's the class where like the boys are good at physical education, they'll laugh at me and stuff like that' (Jason).

Maybe they feel, well it goes back to that whole sense of accomplishment. In the sense that if they feel like they can't succeed in something, for example badminton, well if they're struggling in badminton well maybe they might just sit out or they might just throw a game. They wouldn't participate to their fullest instead of you know, I guess trying to get better, trying to better themselves and trying to better their skills at a certain point. (Matt)

I find that it's the same, I'm not saying that they're girlish, but I'm saying it's the same idea as like the girls. So the guys who for instance who prefer to read or prefer to paint or dance or whatever, there's nothing wrong with that, nothing wrong at all, but at the same time the fun aspect is taken away from them. The fun is taken away from them, the level of desire to get involved with that group is taken away from them and they refuse to get involved. (James)

## PE Activity Preferences

The *PE activity preferences* theme reflected participants' opinions about the sport and PA preferences of boys and girls. The following sub-themes were created: *Girls' likes and dislikes in elementary school*, *Girls' likes and dislikes in high school*, *Boys' likes and dislikes in elementary school*, and *Boys' likes and dislikes in high school*. A cross-case analysis of the results from the PE activity preferences theme is presented in Table 8, Appendix L.

**Girls' likes and dislikes in elementary school.** The first sub-theme of the *PE activity preferences* theme was called girls' likes and dislikes in elementary school, because it reflected participants' feelings about female sport and activity preferences in ESPE.

**Girls' likes.** The female PETE students discussed what activities and sports girls like in ESPE. They felt that girls prefer to engage in individual activities (e.g. dancing, gymnastics, skipping) and team sports.

I think that they liked challenging themselves more in a sense. I think with the guys it's more like challenge against someone else kind of thing but the girls liked to be, 'oh look what I did'. They would often come to me and be like, 'oh come see what I did' and they were really excited about accomplishing something in gymnastics, like getting the front roll or they liked it a lot. They liked the stations. When we did stations they were very excited about it. (Laura)

Lisa recounted from her ESPE field experience that her female cooperating teacher (CT) encouraged girls to engage in singing club because it increased participation.

They had this one thing with the teacher who was my CT. She would have two classes a week of PE. So, one of the two, they would do like a singing club where the girls weren't really active. They just sang in class. The reason my CT was okay with it was because they all participated so much and they enjoyed it so much she figured it was okay, which is fine. You know if you are getting them involved like I can understand that. So that was definitely something they enjoyed doing a lot. (Lisa)

Girls' preference to participate in team sports during ESPE was also discussed.

They liked working as a team [soccer] a lot. They'd cheer each other on. They're very like supportive of each other. They're always the ones who were on the side doing subs ,

would be like cheering each other on. They were very supportive of their team and they liked soccer a lot. That was a big one amongst both girls and boys. (Laura)

The male PETE students spoke about the PA and sport preferences of girls' in ESPE.

Individual activities and the societal/environmental influences and stereotypes towards girls' activity choices were discussed.

They're less into sports, like except for the girls that play soccer at a young age. If you make them play at hockey or basketball, some of them will like it. Some of them won't. They're more into individual stuff, like for example I was talking about goal setting activities that they like ... halo run [cross-country running competition]. They also like it a lot usually because it's something that's more, like girls, they won't be really looking at it as like, 'oh I'm running faster than you'. It's more like, 'can I improve yes' and if they can, then they'll like it. Skipping rope they like it because they play with their friends at double Dutch skipping and in recess, stuff that they can, they're more into stuff that like are more individual and less sports. (Jason)

"I would actually say girls enjoy just about everything. In terms of everything, I would say the same things as boys where they can be active, some girls can be very competitive" (Matt). "I guess just at elementary it seems like all of them as long as they are fun. I'd say for the girls, from what I can see they can generally like anything as long as you make it enjoyable" (Neil).

Cause you do have those girls who love football, especially in elementary school you can see it. You have those tomboyish girls that like sports and they like to play with the boys and they're really competitive and they think they're really good at sports. That's fine but you talk to them and you're like, 'Hey how did you learn to play soccer like that?' Well my Dad always plays soccer with me you know what I mean. Again I find that's it's learnt behaviour. It depends on what it is at home. What it is at what they're parents do outside of school. What they're involved in outside of school makes them really who they are. (Joey)

Marty felt that some girls are guided by society to engage in activities such as dance and gymnastics. When asked why girls like dancing, Marty answered,

I really don't know why they'd enjoy gymnastics and dancing besides society directing them. I feel like they're more into like how their body moves like sports like that rather than shooting a ball at a basket or something like that. (Marty)

***Girls' dislikes.*** The female PETE students felt that girls in ESPE did not prefer rough sports that involve physical contact. “Well I saw like, if they have little things like wresting, stuff like this, like more, physical contact, they like it less” (Catherine). “Dodgeball or any game like dodgeball.... because when you’re playing coed, it’s the whole, the boys are too rough, they’re throwing too hard. They don’t want to look weak because they can’t throw it hard enough” (Lorraine).

The male PETE students felt that girls did not enjoy team sports because (a) the girls may lack the skill and experience to participate in team sports with boys or (b) some girls may not be raised to participate in team sports.

Growing up boys like to practice. They like to play basketball. They like to play soccer in their free time that’s what I see, so just that more experience makes them better players. When they play with the girls, girls have less experience with it so they have a tougher time. I’m not saying that’s all girls. Some girls they do. They play with the boys after school. They play with their brothers so they do have that experience to keep up with others. I think it’s just too challenging for them and then they opt out. Can I skip? Can I do hula hoop? Can I play catch? Can I play with a ball, stuff like that. (Joey)

At the elementary school level, not a lot of girls are introduced to sports like hockey and stuff like that. They’re more introduced to more individual stuff like gymnastics. That’s why maybe sometimes most of them ... they won’t really like team sports but in individual settings like figure skating and stuff like that. We don’t do this at school except for the gymnastics units where most of the girls, they’ll know how to do their cartwheel. They’ll have more ease to understand different stuff like making a bridge and stuff like that. Boys they tend to not really do that. (Jason)

**Boys’ likes and dislikes in elementary school.** The second property of the *PE activity preferences* theme was called *boys’ likes and dislikes in elementary school* as it included participants’ thoughts about boys’ PA and sport preferences in ESPE.

***Boys’ likes.*** The female PETE students spoke about what physical activities and sports boys like in ESPE. Boys’ enjoyment of team sports in ESPE was discussed. Additionally, some of the female PETE students expressed their disbelief that boys enjoyed individual activities

during their field experiences. "They like a lot of cooperative sports, interacting with others that demand more high, moderate to high, level of activity because they just have a lot of energy to spend" (Catherine). Meghan suggested boys always wanted to play dodgeball during her previous field experience because "they can throw hard and it doesn't hurt and they get really competitive." She also felt that boys really liked soccer and basketball because they were "more active than gymnastics or dance would be."

Some of the female PETE students expressed their surprise that, during their field experience, boys enjoyed individual activities such as gymnastics and skipping.

I thought gymnastics, but then I had a gymnastics unit in my last stage [field experience] and they were just focusing more on flips and pyramids instead of cartwheel, like I don't know, whatever girls do in gymnastics. I was actually surprised because I was like, 'okay so you have to build a routine' and I was prepared for all the negative reaction and it really wasn't. There were a couple obviously but it really wasn't as bad as I thought it was going to be. (Meghan)

The male PETE students spoke about boys' PA and sport preferences in ESPE. Many felt that boys preferred team sports, with social and cultural factors and the role of the PE teacher as influential to PA and sport preferences. "I think they really enjoy team sports. Like, at my field experience school, hockey was a big thing for them" (Marty).

Probably like the traditional ones I guess, the ones that it's more okay for boys to like. Soccer, football, like floor hockey and stuff like that. The ones that are I guess male dominated sports. The ones that society are like, you know, you won't find a boy being like, 'oh I love gymnastics' at least not openly you know. (Neil)

That's sort of where the phys ed. teacher is such a big importance on the way you carry yourself. You can make curling fun, darts fun, pool fun if you're intense and energetic about it the kids are gonna be. Which a beauty of teaching elementary, you could teach any sports and the kids are gonna have fun by the way you're presenting it.... I mean right guy who is devoted and who wants to make a difference you can make them, you can make gymnastics a blast for these kids, it's all in the way you go about it. (James)

***Boys' dislikes.*** The female PETE students discussed the physical activities and sports that boys do not like in ESPE. They noted boys' dislike for individual activities.

I feel like it's the whole guys are supposed to be tough and they know that even in grade 3, they know that, 'oh no dancing is for girls' and like, I don't know. It's just people around them will obviously. I feel like it's easier for a girl to do boy's sport than it is for guys, like the other way around. (Meghan)

The male PETE students spoke about boys' aversion towards individual activities in ESPE. "Well personally I would say that dance is the biggest one and gymnastics, dance, gymnastics, I would say are the biggest" (James).

I'd probably go with the individual but more along the lines of the gymnastics, the dance. At a very young age it's fun and they'll find it fun to move around. You know they can into getting used to the movements but once you get to a certain level, boys start thinking that it's, this is a girls sport. Something that they don't identify with and when they don't identify with, it makes it harder for them to move into it. Something where they feel like if they, it would effect their status... like someone would feel like if they did gymnastics they're not cool. They feel like they'd get made fun of for it. (Matt)

**Girls' likes and dislikes in high school.** The third property of the *PE activity preferences* theme was called *girls' likes and dislikes in high school* because it reflected participants' opinions towards the PA and sport preferences of girls in HSPE.

**Girls' likes.** The female PETE students discussed the physical activities and sports girls liked in HPSE. Enjoyment of individual activities, a preference to engage in low intensity activities, the influence of girls' self-perception in a sport environment and girls' self-image were discussed.

High school I saw this a lot more where the girls did very much want to participate in individual sports. I remember at the high school that I taught, there was one teacher who would take the girls during their regular phys ed. period and all the boys would stay and play a team sport. She'd take the girls into another room and they'd do yoga. That was they way they got the girls to participate, so you know, might as well do that. (Lisa)

Something a bit slower. Volleyball is nice because you get a rotation and not every position will be active at the same time, so it's almost like a little break... badminton too because they don't have to go that quickly and there's less contact. (Jackie)

In my past experience as you know, in my stages and even when I was in school, most of the people who don't want to participate were usually girls. Whenever badminton goes up it's not, I mean it can be obviously extremely physical and whatever, but it's not really

that demanding depending on how you're playing. But I think it's the intensity level especially at the high school level. Girls don't want to sweat you know cause then they'll be smelly and stuff like that. It's one of the biggest things I would say from my own experience throughout high school as well as my stage, it's just like girls don't want to get all smelly and stinky and sweaty, so badminton if you play it lightly. (Lorraine)

I think what it comes down to, especially for girls what they will and won't like it's all about am I going to look bad, am I going to embarrass myself if I participate in this. Girls, especially as they get older, then you got the whole impressing boys factor or whatever. They don't want to look bad in front of the boys and stuff like that. They want to do activities that they will appear strong in as opposed to ones that they won't. (Lorraine)

The male PETE students described the PA and sport preferences of girls in HSPE.

Participation in low intensity activities and enjoyment of individual activities were discussed. "It varies between team and individual but opportunities where they, sometimes you know quick bursts of energy like badminton. You can have a rally and then it can stop and you have an opportunity for a rest" (Matt). "They really enjoy gymnastics. Girls are more flexible than boys, so they can show off I guess. Cause I met a lot of girls who are really good at it. They want to show that they're good at it you know" (Neil).

***Girls' dislikes.*** The female PETE students discussed the physical activities and sports for which girls do not like to participate in during HSPE. They felt that girls would avoid sports that required them to wear equipment and that involved physical contact. "Lacrosse, hockey, a lot of the equipment that you have to wear does really stink. If you have to wear a hockey helmet when you're playing floor hockey, it's awful" (Jackie).

Things that can potentially have impact like rugby and stuff like that. They are worried about getting hurt, worried about inappropriate contact especially at an older age. For some girls, it's a big deal. It could be an accident they're worried about somebody bumping into areas that they may not want touched. (Lorraine)

The male PETE students spoke about the engagement in coeducational team sports, high intensity activities and sports that may be viewed as male and not preferred by girls in HSPE.

Some team sports because of the lack of passing. Boys feel like if one girl is not being used very well then maybe we should make a few more passes to the guys you know. If they [girls] feel like they're not gonna get a pass, if they're not gonna be involved in a certain sport, then they're not gonna get involve themselves to a certain degree. (Matt)

Really vigorous activities, anything that requires a lot of running. Soccer, football, pursuit and evade games. They'll just stay in the corner and if they get touched, they're like 'oh I got touched' and then go to the bench. I don't think they want to sweat. (Neil)

"Anything that is intensely, I would say intensely dominated by males via intensity and competitiveness" (James).

**Boys' likes and dislikes in high school.** The fourth property of the *PE activity preferences* theme was called *boys' likes and dislikes in high school* because it reflected participants' attitudes towards the PA and sport preferences of boys in HSPE.

**Boys' likes.** The female PETE students spoke about boys' preference to participate in team sports and 'masculine' sports in HSPE. "They like to do sports they're good at such as hockey, or soccer or um, basketball" (Catherine). "I think high school is definitely team sports oriented. "I think probably more team sports.... it's kind of like a good mix of like cooperation and competitiveness" (Laura). "Anything that's seen as like a masculine sport is what they tend to stray towards" (Lisa).

The male PETE students felt that boys liked to participate in team sports and the male high school students seemed to be impacted by the media.

High school, I'd say the majority team sports. So hockey, basketball, football, soccer because those are the things that everybody sees. It's on TV. The star athletes are there. I mean if I asked 10 people who's a curling star, nobody is going to know. But if you ask who is a basketball star, well they're gonna say, LeBron James, Michael Jordan. It's what everybody sees and what they're exposed to. Close to 100% of the kids that are in sports are either in hockey, soccer, basketball, some form of team sport...the vast majority see team sports and are involved in team sports very early on. (James)

**Boys' dislikes.** The female PETE students discussed the physical activities and sports that boys disliked in HSPE. They spoke about boys' resistance to individual activities due to



embarrassment. “Dance and gymnastics. They find it embarrassing to just dance in front of everyone. At the end of a gymnastics unit you’re going to be presenting a routine in front of others and they’re just like, ‘gymnastics is stupid’ (Meghan).

Probably dance, gymnastics. I think typically society views it as more of a girl’s sport. Both of them are viewed as like a girl’s sport. So guys kind of don’t want to like demasculine, like show their feminine side as they would think it. Cause I mean, if high school guys go out and dance, they might not want to embarrass themselves if they’re thinking about how the rest of the class will see them. (Laura)

Lorraine explained how the stigma attached to dance or gymnastics maybe overcome in HSPE.

Well let’s say you were to cover dance or gymnastics in your phys ed. classes, which you can. It’s a lot harder to get boys to be interested in it, depending upon how you do it. I’ve heard of people finding a different way where even the biggest jock that hates dancing got super involved and they loved it. I think when it comes down to it, really, it’s all about how you deliver it. You can deliver it in a way that will be appealing to everybody. You could potentially take away the ‘oh I don’t want to do that, that’s girly’. I’ve heard of a lot of things over the years where people were able to take that out of the equation and find ways to make the activity attractive to everybody. (Lorraine)

The male PETE students discussed boys’ avoidance of individual activities in HSPE.

I’d say dance and gymnastics. I think it grows even more. I’d say elementary, they start to see that it’s maybe more of a girlish thing to do, that’s just the idea of it. High school, I’d say it goes from being a girl thing to do to a gay thing to do. So if you see a guy that is good at dancing, they’re obviously gonna, well I’m not saying obviously, but there’s a big chance that people are gonna say, ‘aw he’s gay.’ (James)

The concern is that, you know, am I cool? Am I cool enough to participate? Is this cool enough for me to participate in? How will it make me look? Am I going to look feminine? Maybe if there’s a duo and it’s dance and you work on dancing with someone, do I have to touch someone else? This is something where it can create a little bit of an awkward scenario where someone might not want to be put in. (Matt)

I know dance is one. Because usually the girls are in the room, they don’t really want to be perceived as like good dancers. I feel like that’s an influence society made, like plays a role in, like gender roles. For girls they’re supposed to be good at dancing and sports like gymnastics and more stuff related to movement of the body. Boys are supposed to better at team sports so I feel like that perception makes them less into sports like that. (Marty)

## Experiences Before PETE

The *experiences before PETE* theme encompassed participants' sport and PE experiences before entering PETE. The *elementary PE experiences*, *high school PE experiences* and *why I want to become a PE teacher* were the three sub-themes that formed this theme.

**Elementary PE experiences.** The first sub-theme of the *experiences before PETE* theme was called *elementary PE experiences* because it included participants' experiences as students in ESPE. Many of the female PETE students described having little, to no memory of their ESPE experiences. However, a few students spoke about the feelings towards their ESPE experiences and the activities and sports they played most often.

I actually had a really good teacher in my elementary, she did all the grades. She was a very good teacher. None of this regular stuff all the time. Like always changing it up so we got to dabble in a lot of things. She really made sure that everyone is participating, nobody sat out. No, no, no, you're going to participate. 'oh you're wearing a dress today, we'll find a way for you to participate' ... it didn't matter. (Lorraine)

It was very negative. I was a shy kid, I didn't like participating in groups, in team sports or team activities and I still don't. I always failed to understand the directions and the teacher always had negative comments. (Jackie)

I don't remember doing a lot of games. I remember we did basketball, soccer, more sports. We didn't have as much games [in ESPE], so that was kind of new to me, learning about that at the university, the games side of it, teaching games for understanding. (Laura)

The male PETE students expressed their feelings towards their ESPE experiences. They described both positive and negative ESPE experiences as well as the physical activities and sports they participated in. "Yeah, over all, they were really positive" (Jason). "I really enjoyed being there" (James). "They weren't positive. My gym teacher, or my phys ed. teacher, was the type of teacher who would just throw the ball out. He would sit down and watch us play" (Marty). "Hockey, soccer, like we did a bit of basketball, but it was mostly hockey. We did a lot of tag games, I remember tag games a lot. She did also dance units, more creative stuff" (Jason).

“From what I remember, it was based on every other school. The fall was the soccer time, winter was always basketball and hockey, badminton, always the traditional sports, never really something that would stand out for me” (James).

**High school PE experiences.** The second sub-theme of the *experiences before PETE* theme was called *high school PE experiences* because it described the participants’ experiences as students in HSPE. The female PETE students’ described their feelings towards their own adolescent HSPE experiences, the types of physical activities and sports they engaged in and their PE teacher in a coaching role.

In high school, I liked phys ed. It was probably more a bit relaxed, we didn’t do as much... I went to an all-girls’ school and a lot of the sports classes was just kind of like sitting around. I wanted to be more active but I didn’t really get that in high school as much. (Laura)

I hated phys ed. Oh my god, I hated phys ed. There was just nothing going on. It was, ‘we’re playing badminton today. Here the nets are up, go’ and that was it. I actually found a note last week, and I framed it, ‘please excuse Jackie from phys ed. because she is not feeling well and suffering from allergies.’ My mom used to write these letters all the time because I hated phys ed., I just didn’t want to participate. (Jackie)

It was awful because I meant it was probably more awful for the people who don’t like phys ed. but for the people who did, thank god I love soccer. Three years of always the same thing. I wanted to learn. I never got to learn stuff like rugby. I never got to learn more about football, even though he [the PE teacher] was the football coach, he didn’t even bother trying to teach us. (Lorraine)

“We did like basketball, volleyball, running, badminton, it was pretty much the traditional. I can’t think of anything new we did” (Laura). “I think they were planning more for the teams that were actually competing outside of school. They acted as coaches rather than teachers. They tended to gear towards those who were already on the sports teams” (Jackie).

The male PETE students spoke about their HSPE experiences. The majority of the male PETE students described positive experiences in HSPE. They discussed HSPE teachers, differences between ESPE and HSPE experiences and traditional sport participation in HSPE.

“High school was a lot better. The teachers were great. They organized intramural sports. The teachers were just fun to play sports with” (Marty).

I became a lot more competitive, just because of the nature, classes aren't coed anymore, so you're all guys. I mean we did basketball, hockey, badminton, but there was more competition, 100 percent more competition. Everything was based more, I mean you're going from more of a TGFU [teaching games for understanding] in elementary to more skill orientation. Skill and competitiveness were definitely the two focuses in high school. Well competitiveness by nature of being all guys in high school. (James)

“Very traditional. I wouldn't say there was no, I did not do any outdoor education growing up, things like that. I guess the outside the box thinking was not there in phys ed.” (Matt).

**Why I want to become a PE teacher.** The third sub-theme of the *experiences before PETE* theme was called *why I want to become a PE teacher* because it explained the participants' rationale to become a PE teacher. The female PETE students spoke about an interest in sport as their reason to study PE.

I love sports. I mean growing up going to phys ed. classes and stuff like that when you have those people who are sitting out on the sides, you're like, why would you want to sit out on the side? I couldn't understand it you know. So I figured I'd be nice if I could change that in the future you know, teach classes where kids want to participate. I guess transfer my passion for sports to other people was basically it. (Lorraine)

The male PETE students spoke about the influences that led them to pursue the PE profession. Involvement in sport and strong connections with PE teachers were discussed. “I spent my whole life doing sports and then I've worked with kids. I liked it so then I decided it would be a good decision to go into phys ed.” (Marty). “I feel like the phys ed. teachers that I had in high school were a good influence cause I really liked them. I think that was part of my decision too” (Marty).

## Experiences During PETE

The *experiences during PETE* theme comprised the participants' experiences with the teachers and courses in their PETE program. The *PETE educators* and *PETE gender courses* sub-themes were created to form this theme.

**PETE educators.** The first sub-theme of the *experiences during PETE* theme was called *PETE educators* because it reflected participants' statements towards the PETE educators who taught them. The female PETE students spoke about many educators they encountered in their PETE program. Two educators in particular, John and Dr. McFly, were noted by all of the female PETE students as having an influence on their learning. The female PETE students also discussed the lack of professors who teach pedagogy in their department. "There's John who really made an impact. He really makes sure that when you're done those classes, when you're getting out there that you've got the stuff. You understand how to plan your activities" (Jackie).

John, he is just the epitome of what a phys ed. teacher should be. That man has really struck me and has been such an influence for me in phys ed. Just because of his demeanour, his knowledge. There is just so much I can't even wrap my head around on specific thing. (Lisa)

The female PETE students discussed the impact Dr. McFly had on them in their program.

Well I had him only once, Dr. McFly. The way he approached the first-year students in his PE methods class I felt it was too harsh and not enough kindness in his teaching. He was too judgmental. I felt he was screaming all the time trying to discipline them instead of trying to be more, I guess student centered. (Catherine)

Dr. McFly was really good for instilling that professionalism. I feel like it was a good time when that class [first year pedagogy course] was because it's kind of at the point where you don't, a lot of people were still kind of like getting in the program and haven't started to take it seriously yet. Now that I'm in my fourth year, it makes you realize how important it is that phys ed. needs to be taken more seriously. I found his class good at just reminding you how big, how important of a role you're gonna have in kid's lives and people's futures. (Laura)

Catherine believed her PETE program lacked professors who specialized in pedagogy. “I think we have too many researchers, they are not pedagogues themselves. We need more pedagogues in the department, since we are in education. We need to know more how to teach” (Catherine).

The male PETE students discussed the educators who have trained them to become PE teachers in their program. Two educators, John and Dr. McFly were identified by all of the male PETE students as having a positive influence on their development.

I think John is definitely the heart of the program and the entire phys ed. department. I’d even say community. Try to find one undergraduate who says they wouldn’t love to learn and be apart of him one day. (James)

So I’m a big fan of Dr. McFly because he teaches you how to be a professional. How to be an educator, but not only these things. I want to say he wants to teach you how to be a man or a woman, he teaches you how to be a solid person so I really like how he goes about his teaching. (Joey)

Matt spoke about the experiences he had with the PETE teachers as a whole and their impact in his program.

They put a lot of effort into turning us into professionals and turning us into educational specialists in terms of phys ed. They really care for wanting us to succeed and not only have effort put into us and receiving it as a student but we learned to have that being put back into our society as teachers. Their orientation is to create better phys ed. teachers, better the individual and better them as teachers essentially. I guess at no point are they willing to give you any less. It is very gratifying to be with people like that. It makes you feel you’re in the right program and you want to be here. (Matt)

**PETE gender courses.** The second sub-theme of the *experiences during PETE* theme was called *PETE gender courses* because it referred to participants’ experiences with PETE courses that specifically discussed issues of gender and gender stereotypes in PE. The female PETE students identified the following courses: multicultural education, personality and social development and PE pedagogy.

Multicultural education was one of them as well where we discussed those issues but it wasn’t from the developmental side. It was like where we’re at now you know. Students are you know, there’s male and female but now we have to deal with gay students, or bi-

sexual students, or students who are just queer and who fall into a different category. That is not necessarily something that people or teachers or whoever might not just be comfortable with the concept of that. (Lisa)

Personality and social development was a big one. A huge part of the class was gender and how misconstrued it can be I suppose. There's no longer just a female and a male, and females should no longer be doing this and males should no longer just be doing this. There was so much talk about what those stereotypes for those two genders were and how there needs to be an acceptance for an in-between you know. Just learning to acknowledge all these things and being able to adapt not only your language in terms of being able to not necessarily refer to him as a he, if he's uncomfortable with that. Also breaking away from stereotypes like girls like to play with dolls and boys like to play with cars. (Lisa)

Pedagogy, that was good cause we did our project on gender roles so that was a big learning factor too ... the research we did on our final project. I guess I learned that you kind of have to make sure that when you're teaching you supply enough activities that everyone is going to be interested in. There are like the gender stereotyped preferences, but there are some [students] who do have different preferences and it's good to kind of sample where your class is. See what kind of preferences are in the class so you can provide a range of activities. (Laura)

Two female PETE students felt that there were no courses in their program that discussed issues of gender and gender stereotypes in PE. "I don't know if anybody really covered that"

(Lorraine). "I don't think I took one [course] that discussed that" (Jackie).

The male PETE students discussed courses that examined gender roles and gender stereotypes in PE in their program. The courses they identified were: PE pedagogy, Quebec education plan and field experiences.

I remember pedagogy, we touched on that for a bit... that there are differences. They're not always bad. It always gives you something to work with. For example, the boys don't necessarily need to have, I'd say the fun aspect, they want the challenge aspect. Where I find girls need a little bit of a challenge and a little bit of fun. (James)

[Name of teacher] maybe liked touched on it a bit. Girls will like this more, boys will like this more, but it was very brief. She gave ideas like artistic rhythmic dances. Girls will tend to like this more, more expressive, just stuff like that. (Joey)

It's your stage [field experience] that teaches you how to deal with these things and like the experiences of your CT [cooperating teacher]. Like 'oh I've done this and it seemed

to have worked'. Okay you try it and you learn it. Okay, that kind of works so I'm gonna keep that and you put it in your repertoire of teaching. (Joey)

Two male PETE students noted that no courses discussed gender issues in PE. "To be honest, I don't remember" (Neil). "None that I can think of" (Marty).

### **Discussion**

The purpose of this qualitative case study was to explore how PETE students perceived the participation of boys and girls in PE. This study also attempted to identify any gender-biased beliefs that PETE students may hold about male and female participation in PE. The perceived similarities and differences for boys' and girls' participation and non-participation in ESPE and HSPE that emerged with the female and male PETE cases will be discussed.

#### **PE Participation**

**ESPE.** The similarities between cases for girls' participation in ESPE included the opportunity to be active and a break from the classroom environment. This is a new finding in the PETE student belief literature at the ESPE level. Also, there has been little research that has explored children's feelings and rationale about participation in ESPE. Thus, further examination of these findings is warranted.

Poor skill was described by both cases as a reason for girls' and boys' non-participation in ESPE. For instance, Laura believed that girls, who possessed poor athletic skills, may be ridiculed by peers if they participated in activities. Derry (2002) suggested that female PE teachers felt that athletic boys often intimidated girls who were less skilled during HSPE classes. Derry also reported that girls, who were perceived to be less skilled, often received critical comments from boys due to their poor performance. However, the current study revealed that the female and male PETE students also felt that boys may be at-risk for perceptions of negative self-competence related to poor skills. This is a unique finding regarding boys' participation in



ESPE from a PETE student perspective. Further exploration of the participation of low skilled boys in ESPE from their own viewpoint would help to expand upon this discovery.

Differences in opinions about boys' and girls' participation in ESPE did arise between cases. For example, the male PETE students suggested the opportunity for girls to socialize with their friends might be an additional reason for PE participation. While the female PETE students described boys' PE participation as an opportunity to socialize with friends, they also noted that the boys wanted to compete with their peers. The male PETE students felt a sense of accomplishment drove the boys' motivation to participate in ESPE. This finding is supported by prior research that indicated good performance in sports is considered to be more important to boys than girls (Eccles & Harold, 1991; Fredricks & Eccles, 2002; Jacobs, Lanza, Osgood, Eccles, & Wigfield, 2002).

Some female PETE students commented on issues of sweating and physical appearance as barriers to girls' participation in ESPE. It is concerning that this issue was perceived by the female PETE students to manifest so early in an elementary school student's life. This is a new and important finding about girls at the ESPE level, given past research found physical appearance was important for girls to be perceived as popular in elementary school (Adler, Kless & Adler, 1992). Thus, future research should explore the precursors of the body image issue in ESPE as our findings suggest. As our study will further indicate, body image is an important issue of concern for girls at the HSPE level.

Furthermore, the male PETE students felt that coeducational PE classes may limit the involvement of some girls in PE lessons. Prior research also suggested that female students who engage in single-gender HSPE classes have higher rates of participation when compared to coeducational PE classes (Hannon & Ratliffe, 2007). Little to no research exists which compares

the rates of participation of girls and boys in single-gender and co-education ESPE environments.

**HSPE.** Both female and male PETE students discussed the opportunity to socialize with friends and an interest in sport as positive factors for girls' participation. These findings reflect those found in another a case study that focused on the promotion of PA for girls. Felton and colleagues (2005) reported that PE was more enjoyable for female adolescents when they worked together in groups. The female and male PETE students also mentioned competition and the prospect of a break from the classroom environment as a potential reason for boys' participation in HSPE. Similarly, Morey and Goc-Karp (1998) also found that grade 10 students viewed HSPE as a fun break from their other academic subjects.

Many female and male PETE students felt that sweating was a major reason for girls' non-participation in HSPE. Laura described how girls in coeducational school settings may be concerned about boys' perceptions of physical appearance when females sweat. For example, Neil noted the effort that girls put into their appearance before they arrive at school and how participation in PE can ruin their "look." The female PETE students suggested that if additional time was provided in HSPE for girls to prepare for subsequent classes, their level of participation might increase. However, Laura felt that sweating in PE was less of a concern for boys. Sweating and changing of clothes has been well identified as barriers to teenager girls' participation in HSPE (Couturier, Chepko, Coughlin, 2007; Olafson, 2002; Ryan, Fleming, & Maina, 2003).

The female and male PETE students both described poor athletic skill as a potential reason for boys' non-participation in HSPE. One of the study's participants, Lisa, stated from her ST experiences that some boys, who did not possess the same skillset as their male peers, were thought to be gay. Past research has highlighted girls' and boys' avoidance of HSPE as a

consequence of feeling unskilled in athletic abilities (Gibbons & Humbert, 2008; Ntoumanis, Pensgaard, Martin, & Pipe, 2004; Ryan et al., 2003). Additionally, the disinterest of some boys in the PE curriculum was discussed by both cases as a factor for their non-participation in HSPE. These boys were described as preferring other subject areas such as literature or the arts and, thus, may not find value in PE participation. However, Chorney and Weitz (2009) argued that students may acquire positive attitudes towards PE if they are afforded choices and input in how to learn in PE and participate in PE activities.

The male PETE students, unlike their female counterparts, also discussed the importance of girls to maintain a positive body image as a reason for their HSPE participation. For instance, Joey felt that girls in high school are more aware of maintaining a physically active lifestyle because they want to be in shape as they may feel influenced by peers and the media to look fit. This finding provides support for single-gender PE environments. For example, Olafson (2002) found that girls in grade seven and eight felt self-conscious and pressured to look attractive when participating in coeducational HSPE. Ollis and Meldrum (2009) further argued that single-gender PE environments may allow girls to participate in HSPE without the exposure to boys' sexual innuendo and belittling of girls' issues and physical behaviours. However, there is evidence to suggest that girls who participate in coeducational environments are more active compared to single-gender environments (McKenzie, Prochaska, Sallis & LaMaster, 2004). Therefore, it is important to develop more research that would investigate this phenomenon.

The discussion of girls' enjoyment of competition as a motivating characteristic to participate in HSPE was unique to the female PETE students. However, much of the literature suggests that placing an emphasis on competition and skill in PE classes can generally minimize

students' participation levels and feelings of success (Brooks & Magnusson, 2006; Dunton, Schneider & Cooper, 2007; Webber et al., 2008).

### **PE Activity Preferences**

Research suggests that adults will classify different PA opportunities as specifically appropriate for females or males (Lirgg, George, Chase & Ferguson, 1996). The female and male PETE students in this study shared their perceptions about the sports and PA that girls and boys prefer and do not prefer in ESPE and HSPE.

**ESPE.** Both groups felt that girls favoured individual activities and boys preferred participation in team sports. However, the female PETE students also believed that some girls may enjoy team sports and some boys may enjoy individual activities. Gender-role stereotypes also emerged from these discussions. For example, some of the male PETE students felt girls' preference for individual activities was the result of a disinterest in traditional sports taught during ESPE. Some male PETE students described girls, who did play sports, as 'tomboys.' Conversely, one of the female PETE students, Megan, noted her surprise that boys in ESPE enjoyed skipping during her elementary field experience! Other instances of gender-role stereotypes arose when boys' participation in team sports in ESPE was discussed. For instance, some of the female PETE students felt boys enjoyed team sports because (a) these types of activities would be more active in comparison to individual sports (e.g., gymnastics, dance, etc.) (b) boys had higher energy levels than girls and (c) the boys seem to enjoy competition more than girls. The male PETE students described team sports as being typically male dominated and thus socially more appropriate for boys to participate in. These findings coincide with past research that indicated girls and boys preferred different PA and sports (Eccles & Harold, 1991; Fasting, 2003; Pfister, 1993). For example, boys participated in sports such as boxing, ice

hockey, martial arts and football more than girls. Conversely, participation rates were higher in sports such as ballet, dance, figure skating and aerobics for girls as compared to boys (Fasting, 2003; Klomsten, Skaalvik, & Espnes, 2004).

Discussion about some boys' dislike for individual activities in ESPE was also noted by both cases. For instance, the female PETE students spoke about how boys may believe that participation in dance is not socially appropriate for them. The male PETE students also shared this sentiment as they described dance as an activity that most boys do not identify with and may get ridiculed for their participation. Past studies revealed that if an individual believes that an activity is appropriate to their gender, the person may feel more competent to participate in it. Conversely, if an activity is perceived to be gender inappropriate, an individual may feel less competence to participate in it (Harrison, Lee, & Belcher, 1999; Lee, Fredenburg, Belcher, & Cleveland, 1999, Lirgg et al., 1996).

**HSPE.** The sport and PA preferences of girls and boys were also discussed. Notably, girls' preference to participate in low intensity activities, such as badminton, was discussed by both female and male PETE students. For example, Matt felt that badminton offered girls the opportunity for a 'rest' between rallies. However, Lorraine and Jackie believed that badminton could be played at a lower level of intensity and involved less physical contact. The female PETE students suggested that playing at a lower intensity would prevent girls from sweating, which in turn, would increase their participation in PE. Sweating was also described by the male PETE students as a reason for girls' avoidance of certain activities (e.g., soccer, football, activities which involve running, etc.). Sweating has been acknowledged as a barrier for girls' participation in HSPE (Couturier et al., 2007; Olafson, 2002; Ryan et al., 2003). Girls in HSPE were also thought to avoid male dominated sports as they could become too competitive. Prior

research has shown that girls may be disinterested in overly competitive teaching climates and prefer activities focused on the individual, creativity or cooperation (Kay, 1995).

Both the female and male PETE students spoke about boys' enjoyment of team sports as well as their reluctance to participate in individual activities in HSPE. The female PETE students felt that boys preferred "sports they are good at" and sports perceived as masculine. The male PETE students explained boys' preference for team sports as a result of exposure to TV media. The female PETE students thought boys would avoid participation in individual activities, such as dance, because of the societal stigma that could be attached. For example, the female PETE students felt dance was perceived as a girls' sport and boys would be demasculinized if they participated. The male PETE students also shared these feeling and thought boys viewed dance as a "girlish" activity and they would not be "cool" if they participated. These findings may reflect the manner in which the PE curriculum is presented to students in high school. For example, Green (2008) argued that, more often then not, the PE curriculum is taught in such a way as to promote physical and psychological traits of being a man. As such, boys may view dance as meaningless, gay or unmasculine. Additionally, the influence of gender-roles was discussed by Marty who expressed how society may direct girls towards activities that are related to expressions of the body, such as dance and gymnastics, while boys are directed towards competitive team sports. These perceived gender differences may be the result of stereotypes for girls and boys (Gill, 2002). For instance, the following characteristics have been used to describe male sports: speed, strength, endurance and team spirit (Koivula, 2001). Team sports (e.g. soccer, football) and activities that may demonstrate strength (e.g. wrestling, weightlifting) encompass these masculine characteristics. Conversely, sports such as aerobics, dance and gymnastics may be typically viewed as feminine (Klomsten et al., 2004; Koviula, 1995; Pfister,

1993) and tend to be associated with the traits of gracefulness, beauty and non-aggressiveness (Klomsten, Marsh, & Skaalvik, 2005). Future research should also explore how PETE students are educated about underlying stereotypes when learning how to teach various activities that may be perceived as male or female. For example, male and female PETE students discussed the reluctance of boys to participate in dance. Clearly, we must ask how these various activities are presented and taught in PETE programs. What are the most effective and beneficial methods for teaching activities that are inclusive of both females and males?

### **Experiences Before PETE**

The findings revealed the diverse ESPE and HSPE experiences that may include a pre-service teacher's background prior to their entrance in PETE (Matanin & Collier, 2003). Both the female and male PETE students described positive and negative experiences as adolescents in PE. They also discussed the sports and PA that they participated in as students in PE. These combined experiences may have an enduring impact on how prospective PE teachers view the subject of PE (Curtner-Smith, 1999; Green, 1998). Additionally, many of the PETE students were attracted to teach PE due to a passion for sport and strong relationships with past PE teachers. These findings are similar to prior occupational socialization research in PE (Hutchinson & Buschner, 1996; Macdonald, Kirk, & Braiuka, 1999).

### **Experiences During PETE**

PETE may have a greater impact and influence on PETE students if their university instructors are perceived to be credible (Grabber, 1995). Two educators, in particular, were described by both cases in the current study as having a strong influence on the participants' learning and development towards becoming PE teachers. However, some PETE students felt their program consisted of too many researchers in Kinesiology and lacked faculty who

specialized in PE pedagogy. This trend has been found in other PETE programs across Canada and the United States as many programs have experienced a shift towards fields of Kinesiology (Macdonald et al., 1999; Melnychuk, Robinson, Lu, Chorney, & Randall, 2011). Scholars argue that with this shift, PETE educators may become marginalized within their program and feel their research interests are undervalued (Melnychuk et al., 2011), which in turn, may affect the quality of training PETE students receive. It is worth noting that of the 14 tenured or tenured track professors in the participants' Kinesiology and Physical Education department, only one professor performed research in PE while another professor had a Masters level specialization in PE pedagogy.

Many PETE program courses that cover gender issues are given little importance in PETE curriculums in the US, United Kingdom and Australia (Dewar, 1990; Macdonald, 1993). As such, PETE students have viewed such courses as irrelevant or to be avoided (Dewar, 1990; Macdonald, 1993). In this study, some of the female and male PETE students indicated that they did not encounter any PETE courses that discussed issues of gender or gender-role stereotypes in PE. However, other female and male PETE students were able to identify and describe the courses that focused specifically on gender issues in PE. The male PETE students provided superficial discussions about what they learned while the female PETE students were more detailed in their answers.

### **Strengths and Weaknesses**

This study adds to the literature on the overall beliefs of PETE students. Data gathering from multiple sources, prolonged engagement and the sampling approach are three strengths of this study. First, the collection of multiple data sources allowed for thorough participant descriptions. For example, participant profiles were developed through the use of a demographic



questionnaire, field experience logbook and a PETE course checklist. The use of the last two artifacts also helped to stimulate participants' memories and discussions during interviews.

Next, the PI engaged in prolonged engagement in the PETE program as both a graduate of the undergraduate PETE program and a Master's student who was a TA for courses taken by the study participants in their first and/or third year of their program. Thus, a rapport was developed over a period of time with the PI and the participants that allowed for a sense of comfort during the interviews. For instance, the PI and the PETE student participants engaged in open interview dialogues because the PI may be considered as an insider and was perceived to be similar to the participants (Morgan & Guevara, 2008).

Lastly, the use of a purposeful sampling approach allowed for information rich cases to be identified. For example, the female and male study participants had experienced 13 weeks of ST at both the elementary and high school level. Thus, the study's participants were in the final phases of their PETE program and it may be expected that these rich ST experiences would have helped to shape their perceptions of girls' and boy's participation in PE.

Limitations of the current study included generalizability of the research findings and the cross-sectional nature of the research design. First, results from this study may only be generalizable to the specific university's PETE program (Armour & Griffiths, 2012). Thus, findings from this case study cannot transfer to other PETE programs and any program-specific generalizations must be made with caution. For example, the cross-sectional nature of the research design only represents the perceptions of sophomore and senior PETE students. This case study did not identify the perceptions of PETE students at the start of a PETE program to track or ascertain how or if perceptions changed as the students progressed through the four-year PETE program.

## **Recommendations for Future Research**

This study appears to be one of the first investigations to examine the participation and gender-biased beliefs of PETE students towards females and males in PE. In addition to the future research directions already provided in this text, three main recommendations for future research are proposed to broaden the scope and quality of literature in this area. First, Graham (1991) argued studies that examine teacher beliefs should be longitudinal in design. A longitudinal approach may enable researchers to assess how participation and gender-biased perspectives of PETE students change throughout the course of their respective programs. Doolittle, Dodds and Placek (1993) also noted that identifying occurrences for which PETE students embrace a change in their beliefs about teaching could be beneficial to the improvement of PETE programs. For example, the use of time series designs on specific PETE program components (e.g. field experience, PE pedagogy courses) may identify how such components could influence PETE students' gender perspectives towards girls' and boys' participation in PE as they are preparing to become teaching professionals.

Second, future research could explore the depth and quality of PETE course offerings related to participation and gender discourse in PE. It appears that some of the study's participants identified courses that highlighted gender issues in PE while many others could not. Hence, further examination in this area could prove beneficial to better understand how PETE students are prepared to teach students in single-sex and coeducational PE environments.

Lastly, an examination of the theory of occupational socialization as a means to potentially identify when and how gender-role stereotypes are formed in PETE students could be advantageous to research in this area. For example, in this study, both female and male PETE students held strong gender-role stereotypes about the participation of boys and girls in PE and

PA. Further examination of PETE students' gender experiences in school and sport during the phase of acculturation may help to better understand how beliefs about gender are formed prior to their entrance in a PETE program. This understanding may better prepare PETE educators to challenge incorrect gender beliefs immediately upon the start of the professional socialization phase of PETE students.

### **Conclusion**

This study attempted to shed light on an area of PETE research that needs to be thoroughly investigated. For example, the study participants discussed personal views about why boys and girls do or do not participate in ESPE and HSPE. Strong gender-role stereotypes about girls and boys in PE and PA settings also emerged in these discussions. These findings may be the precursors to understand how teachers interact and treat girls and boys in PE. For example, prior research indicated professional teacher interactions might affect and influence student outcomes and involvement in PE lessons (Nicaise, Cogérino, Bois & Amorose, 2006). Hence, these insights are substantial because little is known about the gender-role stereotypes that PETE students hold before, during and after their instruction in a PETE program. Therefore, these initial study findings have provided teacher educators with a preliminary and deeper understanding of how PETE students may view the participation of girls and boys in PE. These findings, in turn, may better inform teacher educators about participation and gender-based concerns which then may be more completely addressed through progressive PETE programs.

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## Appendix A

## Breakdown of PETE Credits Required For Graduation in the United States

Table 1

*PETE Credit Hour Breakdown*

<b>Credit Hours</b>	<b><i>M</i></b>	<b><i>SD</i></b>	<b>Range</b>
Overall	129.75	7.8	120-156
Major	54.57	15.5	20-90
Disciplinary	18.20	7.0	6-41
Pedagogy	16.10	8.3	3-40
Student teaching	11.60	2.3	6-17
Sport skills	9.61	3.8	2-23
Professional issues	8.73	6.1	2-42

*Note.* Reprinted, with permission, from S.F. Ayers and L.D. Housner, 2008, "A descriptive analysis of undergraduate PETE programs," *Journal of Teaching in Physical Education* 27(1): 51-67.

## Appendix B

## Breakdown of PETE Program Curriculum Content Areas in the United States

Table 2

*Content Taught in PETE Program Curriculum*

	Separate Course		Infused		Separate & Infused		Not Covered	
	%	n=	%	n=	%	n=	%	n=
Adapted	54.5	24	6.8	3	38.6	17	0	0
Activities & Materials	20.5	9	45.5	20	34.1	15	0	0
Administration	61.4	27	15.9	7	18.2	8	4.5	2
Assessment	15.9	7	40.9	18	43.2	19	0	0
Behaviour Management	4.5	2	72.7	32	22.7	10	0	0
Biomechanics	61.4	27	11.4	5	25.0	11	2.3	1
Coaching	63.6	28	4.5	2	20.5	9	11.4	5
Methods	31.8	14	25	11	43.2	19	0	0
Exercise Science	50	33	18.2	8	22.7	10	9.1	4
Exercise Physiology	75	33	2.3	1	20.5	9	2.3	1
Fitness Education	18.2	8	47.7	21	31.8	14	2.3	1
Motor Development	36.4	16	27.3	12	34.1	15	2.3	1
Motor Learning	45.5	20	11.4	5	40.9	18	2.3	1
Social Psychology	50.0	22	22.7	10	18.2	8	9.1	4
Technology	13.6	6	52.3	23	31.8	14	2.3	1

*Note.* Reprinted from “A Descriptive Analysis of Undergraduate PETE Programs in the Central District,” by Hetland & Strand, 2010, *International Council for Health, Physical Education, Recreation, Sport and Dance*, 5, p. 6.

## Appendix C

## Description of Participants

Table 3

*Participant descriptive information*

Name	Sex	Race	Age	G.P.A.	Year of Study
Catherine	Female	Caucasian	54	3.2	4
Jackie	Female	Caucasian	32	3.93	4
James	Male	Caucasian	22	3.5	3
Jason	Male	Haitian	22	3.49	3
Joey	Male	Caucasian	22	3.4	3
Laura	Female	Caucasian	24	3.71	3
Lisa	Female	Caucasian	23	3.4	4
Lorraine	Female	Caucasian	27	2.78	4
Marty	Male	Caucasian	21	3.58	3
Matt	Male	Caucasian	22	3.1	3
Meghan	Female	Caucasian	21	3.4	3
Neil	Male	Mauritian	21	3.74	3

*Note.* Names of participants were replaced with pseudonyms.



## Appendix D

### Participant Profiles

#### **Catherine**

Catherine is a 54 year-old Caucasian female. She was a provincial champion in middle distance running during her twenties. Catherine accepted a track and field scholarship to study education at a university in the United States. After a year in the United States, she returned to study elementary education at a university in her home province. However, later in her life, she decided that she wanted to teach teenagers and transferred to a PETE program.

#### **Jackie**

Jackie is a 32 year-old Caucasian female who was heavily involved in gymnastics as both a competitor and coach for most of her life. Jackie competed in gymnastic competitions at the national level from 9-16 years. She coached gymnastics at both the provincial and national level for a period of 14 years as an adult. Jackie received a degree in Psychology before entering her PETE program. She had worked closely with children in schools after receiving her degree. However, Jackie wanted teach and be more involved with children in an active sport and physical activity setting. This was a primary reason for her entrance into a PETE program.

#### **James**

James is a 22 year-old Caucasian male who was involved in semi-competitive basketball as an adolescent. He attended basketball practices during the week and participated in inner-city tournaments on weekends. James played basketball on his high school team for five years. He developed strong relationships with his PE teachers during high school. One of his PE teachers was also the coach of his basketball team. His involvement with sport and positive relationships with his PE teachers were factors for his decision to study PE.

### **Jason**

Jason is a 22 year-old Haitian male who is a varsity athlete in university football. He participated in many different sports as an adolescent. However, Jason developed a passion for playing football as a student in high school in grade 10. This passion for football continued as he entered Collège d'enseignement général et professionnel (CEGEP) and he began to help coach his old high school football team while studying communications. He continued to help coach his old high school football team as entered his first year in his PETE program. In his second year of university, Jason stopped coaching and began playing varsity football. Jason realized the important role he could play in improving the lives of adolescences through his coaching experiences, as he wanted to be a good role model and be a positive influence on the team's players. This desire translated into his decision to study PE.

### **Joey**

Joey is a 22 year-old Caucasian male who is a varsity swimming athlete. He was heavily involved in competitive swimming at a young age and competed on junior national teams. He participated in the 2008 Olympic trials during high school and the 2012 Olympic trials when he was in university. When Joey applied to university, he was accepted into three different programs, Arts, Psychology and PE. PE was his "back up" choice. He decided to study PE because of strong relationships with past PE teachers. He also wanted to play an important and influential role in the lives of young people. Joey felt becoming a PE teacher would make him "the most happy" and would suit his personality well.

### **Laura**

Laura is a 24 year-old Caucasian female who is currently a track and field varsity athlete. As a youth, Laura competed in gymnastics and track and field at an elite level. As a track athlete

in her teens, she was sponsored to compete in track and field events at provincial and national levels. Laura began coaching student athletes on her high school's track and field team in grade 11. She recollected her coaching experiences as enjoyable and felt proud of the differences she made with the student athletes. Laura described her past coaching experiences, love for sports, desire to work with young adults and the influence of past PE teachers as factors for her decision to enter PETE.

### **Lisa**

Lisa is a 23 year-old Caucasian female who was very active in team sports during childhood and adolescence. She was involved in many school teams at both the elementary and high school level. Lisa played on both her high school's soccer and basketball teams for a period of four years and three years respectively. She received a PE award for showing the most promise as a student athlete in her least year of high school. Lisa always knew that she wanted to be a teacher but was unsure of what she wanted to teach. Her love for sports, her involvement in an advanced PE class for student athletes in high school and her strong connection with a particular high school PE teacher guided her decision to study PE.

### **Lorraine**

Lorraine is a 27 year-old Caucasian female. As an adolescent, Lorraine "lived outside" and was always involved in sports and games with neighborhood friends. She was always playing team sports with boys during high school (i.e. at lunch or at the end of the day). Lorraine desired to play on competitive intercity teams as a teenager but was never able to, as her parents would not allow it. However, she did play on her high school's flag football team for 5 years. Lorraine did not attend CEGEP and was admitted to her PETE program as a mature student. Her decision to become a PE teacher was based on her love for sport and her experiences as a high

school student. Lorraine noticed many of her classmates would not participate during her PE classes and wanted to minimize this when she became a PE teacher by transferring her passion for sports to her students.

**Marty**

Marty is a 21 year-old Caucasian male. At a young age, Marty was heavily involved in track and field. He competed in high school track for 5 years. When not competing with his high school team, Marty also attended provincial and national track and field competitions in the summer. Marty typically placed in the top 10 at both levels. He is currently on the university varsity track team. His decision to enter his PETE program was based on his love for sports and the positive interactions and experiences that he had with his high school PE teachers.

**Matt**

Matt is a 22 year-old Caucasian male who was involved in high-level competitive baseball and basketball outside of school during his early teen years. He played baseball at the provincial level and basketball at the intercity AAA level until the end of high school. Matt participated in an advanced PE class for student athletes from grade 8 to grade 11. After high school, he was a player on both his CEGEP's baseball and volleyball teams for a period of one year. Along with his involvement in sports, Matt's family had a strong influence on his desire to become a PE teacher. Many of his family members are teachers, including his father who was a PE teacher and is now a university professor. Matt was inspired to give back the positive PE and sporting experiences that people have given to him.

**Megan**

Megan is a 21 year-old Caucasian female who described herself as a "tomboy" while growing up. She was actively involved in school sport throughout elementary and high school

but never participated at a competitive level. While still attending her regular PE classes, Megan also participated in an advanced PE class that specifically focused on teaching basketball from grade 8-11. Her decision to study PE arose from her enjoyment of physical activity and her desire to engage in social work with youth and adolescents. Megan felt that she found a common ground by becoming a PE teacher as she would be able to help children through the enjoyment of sport and physical activity.

### **Neil**

Neil is a 21 year-old Mauritian male who was involved in house league soccer and martial arts during his childhood. He played on his high school's soccer and track and field team for three years. Neil enjoyed the competitiveness that he found playing soccer and the individual challenges he faced on the track and field team. He stated his decision to study PE was last minute and had applied to other programs of study. He decided to pursue PE because many of his favourite teachers in elementary and high school were PE teachers. Neil associated the PE profession with the characteristics of these teachers and wanted to be that type of person later in his life.

## Appendix E

## Demographic and Sport History Questionnaire

Participant ID# \_\_\_\_\_

Name: \_\_\_\_\_ Sex (Male/Female): \_\_\_\_\_

E-mail address: \_\_\_\_\_

How old are you? \_\_\_\_\_ Date of birth: \_\_\_\_\_ (Day/Month/Year)

Where were you born? (City, Province/State, Country) \_\_\_\_\_

To the best of your knowledge, what is your current grade point average (GPA)? \_\_\_\_\_

How would you classify yourself? (Please circle one)

Arab

Asian

African

African American

Caucasian/White

Inuit/First Nation

Latino

Would rather not say

Other: \_\_\_\_\_

Do you or did you play on any varsity teams at University? Yes / No (Please circle)

If yes, which team do you/did you play for? \_\_\_\_\_

For how many years did you play for this team? \_\_\_\_\_

Did you play on any sports teams in CEGEP? Yes / No (Please circle)

If yes, which team(s) did you play for? \_\_\_\_\_ / \_\_\_\_\_

How many years did you play on that team for? \_\_\_\_\_ / \_\_\_\_\_

Did you play on any sports teams in High School? Yes / No (Please circle)

If yes, which team(s) did you play for? \_\_\_\_\_ / \_\_\_\_\_

How many years did you play on that team for? \_\_\_\_\_ / \_\_\_\_\_

Did you play on any sports teams in elementary school? Yes / No (Please circle)

If yes, which team(s) did you play for? \_\_\_\_\_ / \_\_\_\_\_

How many years did you play on that team for? \_\_\_\_\_ / \_\_\_\_\_

## Appendix F

## Interview Guide

*Perceptions of PETE Students about Boys' and Girls' Participation in Elementary and High School Physical Education***Time of interview:****Date:****Participant ID #:**

Remind the participant about the purpose of this study. Remind the participant that there are no wrong answers, that they may refuse to answer any questions, and that you are only interested in their honest perspectives.

Remind the participant that their identity will remain anonymous and that any names or places they reference that could identify them will be replaced with pseudonyms (give example of what this means – Mike becomes Bob and Royal Vale High School becomes Springfield High School). Remind them that their identity will always remain confidential, they can refuse to answer any question and at any point, they can withdraw from the study with no consequences.

**Interview Questions:****Acculturation phase**

1. So tell me a little about your decision to study physical education.
2. Would you describe yourself as active or inactive during your childhood and adolescence? Please elaborate.
3. If you considered yourself an active child and/or adolescent, what types of physical activities and sports did you participate in?
  - a. Did you participate in any formally organized sport? If so, at what level?
4. What were your experiences like as a student in elementary physical education classes?
  - a. What sports or games did you play most often?
  - b. Were your classes coed or separated into male and female classes?
  - c. Describe the extra-curricular sport and physical activity programs you participated in at the elementary school level.
5. What were your experiences like as a student in high school physical education classes?
  - a. What sports or games did you play most often?
  - b. Were your classes coed or separated into male and female classes?

- c. Describe the extra-curricular sport and physical activity programs you participated in at the high school level.
- 6. Describe the teachers who taught you physical education.
- 7. Are there any teachers you know that you would like to model when you become a physical education teacher? Why?
- 8. Are there any teachers you know that you would not want to model when you become a physical education teacher? Why?
- 9. Describe the coaches who taught you sport or physical activity outside the school setting during your childhood and adolescence.
- 10. Did you participate in any sports during CEGEP? If so, please describe.
- 11. Are you currently participating in any sports in your undergraduate education? If so, please describe.

### **Gender and PE Participation**

- 12. What activities or sports do you think boys enjoy participating in during elementary school? Why?
  - a. What activities or sports do you think they don't enjoy participating in? Why?
- 13. What activities or sports do you think girls enjoy participating in during elementary school? Why?
  - a. What activities or sports do you think they don't enjoy participating in? Why?
- 14. Why do girls like physical education in elementary school?
  - a. Why do some girls not like to participate in elementary school physical education?
- 15. Why do boys like physical education in elementary school?
  - a. Why do some boys not like to participate in elementary school physical education?
- 16. What activities or sports do you think boys enjoy participating in during high school? Why?
  - a. What activities do you think they don't enjoy participating in? Why?
- 17. What activities or sports do you think girls enjoy participating in during high school? Why?
  - a. What activities do you think they don't enjoy participating in? Why?



18. Why do boys like physical education in high school?
  - a. Why do some boys not like to participate in high school physical education?
19. Why do girls like physical education in high school?
  - a. Why do some girls not like to participate in high school physical education?

**Professional socialization phase**

20. Describe the teachers who have trained you to teach physical education in your program.
21. To the best of your knowledge, did any of the teachers who trained you to teach physical education coach university sports teams? If so, which courses did they teach you?
22. Which specific courses have you have taken in your program that have helped to prepare you to teach boys and girls physical education at the elementary level?
  - a. How have these courses helped to prepare you to teach boys and girls in elementary physical education?
  - b. How have they changed your views about teaching boys elementary physical education?
  - c. How have they changed your views about teaching girls elementary physical education?
23. Which specific courses have you taken in your program that have helped to prepare you to teach boys and girls physical education at the high school level?
  - a. How have they helped to prepare you to teach boys and girls in high school physical education?
  - b. How have they changed your views about teaching boys high school physical education?
  - c. How have they changed your views about teaching girls high school physical education?
24. Which specific courses have you taken in your program that discussed issues of gender and gender stereotypes in general education, physical education and/or sports?
  - a. What did you learn from these courses?
  - b. Did these courses change the way you think about teaching boys and girls physical education?
25. Do you have any comments or questions for me?

## Appendix G

## PETE Course Checklist

Please consult the list below of all the required courses for the B.Ed. in Physical and Health Education at your university. To the best of your knowledge please indicate which courses you have successfully completed to date by marking a tick in the respective box beside each course. Please also indicate the elective courses that you have taken to date by writing the respective course name in the blank space provided.

[illegible]

## Appendix H

## Checklist Required PETE Courses

Table 4

*Checklist of Required PETE Courses Completed by Participants*

Participant	Required Courses																									
	Adapted Physical Activity	Anatomy and Physiology	Biomechanics And Motor Learning	Educational Computer Applications	Educational Media	Educational Psychology	Evaluation in Physical Education	Exercise and Health Psychology	First Nations and Inuit Education	Health Education	Historical Perspectives	Media Technology and Education	Motor Development	Multicultural Education	Nutrition and Wellness	Personality And Social Development	Philosophical Foundations of Education	Physical Activity and Health	PE Curriculum Development	Physical Education Methods	Physical Education Pedagogy	Physiology in Sport and Exercise	Policy Issues in Quebec Education	Quebec Education Program Orientation	Research Methods	Sport Psychology
Catherine	X	X	X			X	P	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X
Lisa	X	X				X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Lorraine	X	X	X	X	X	X		X		X	X		X	X	X	X	X		X	X	X	X	X	X	X	X
Jackie	X	X	X		X	X	P	X		X	X	X	X	X			X	X	X	X	X	X	X	X		
Megan	X	X	X			X		X		X	P		X			P	P	X	P	X	X	X	X	X		
Laura	X	X	X			X	P	X		X	P	X	X		X	P	X	X	P	X	X	X	X	X	P	X
James	X	X	X		X	X		X		X	P	X	X		X	P	P	X	P	X	X	X	P	X		
Marty	X	X	X			X		X		X	P	X	X		X	P	P	X	P	X	X	X		X		
Matt	X	X	X		X	X		X		X	P		X		X	P	P	X	P	X	X	X		X		
Joey	X	X	X		X	X		X		X	P	X	X		X	P	P	X	P	X	X	X				
Neil	X	X	X			X				X	P	X	X		X	P	P	X	P	X	X	X		X		
Jason	X	X	X		X	X		X		X	P	X	X		X	P		X	P	X	X	X		X		

*Note.* Courses currently in progress but not completed are indicated with P.

## Appendix I

## Checklist of PETE Skill Courses

Table 5

*Checklist of Required and Elective PETE Skills Courses Completed by Participants*

Participant	Required Skills Courses										Elective Skill Courses									
	Aquatics	Basketball 1	Games Principles and Practice 1	Games Principles and Practice 2	Educational Gymnastics	Principles of Dance	Racquet Sports	Soccer	Track and Field	Volleyball 1	Healthy Lifestyle Activity	Football	Martial Arts	Weight Training	Winter Outdoor Activities	Volleyball 2	Softball	Lacrosse	Ice Hockey	Basketball 2
Catherine	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X					
Lisa	X	X	X	X	X	X	X	X	X	X		X				X	X	X	X	
Lorraine	X	X	X	X	X	X	X	X	X	X	X		X		X	X			X	
Jackie	X	X	X	X		X	X	X	X	X		X	X		X		X	X		
Megan	X	X	X	X	X	X	X	X	X	X	X		X				X			
Laura	X	X	X	X	X	X	X	X	X	X		X					X	X		X
James	P	X	X	X	X	X	X	X	X	X		X		X						
Marty	P	X	X	X	X	X	X	X	X	X	X		P							
Matt	P	X	X	X	X	X	X	X	X	X	P					P				
Joey	P	X	X	X	X	X	X	X	X	X						P				X
Neil	P	X	X	X	X	X	X	X	X	X			X			P				
Jason	P	X	X	X	X	X	X	X	X	X			X			P				

*Note.* Courses currently in progress but not completed are indicated with P.

## Appendix J

## Checklist of PETE Elective Courses

Table 6

### Checklist of PETE Elective Courses Completed by Participants

[illegible]

## Appendix K

Table 7

*Cross-Case Analysis of PE Participation Theme*

Case Topic	Case	
	Female PETE Students	Male PETE Students
Girls' participation in ESPE	<ul style="list-style-type: none"> <li>• Opportunity to be active</li> <li>• Break from classroom</li> </ul>	<ul style="list-style-type: none"> <li>• Opportunity to be active</li> <li>• Break from classroom</li> <li>• Socialize with friends</li> </ul>
Boys' participation in EPSE	<ul style="list-style-type: none"> <li>• Expend energy</li> <li>• Socialize with friends</li> <li>• Competitive aspect</li> </ul>	<ul style="list-style-type: none"> <li>• Expend energy</li> <li>• Provide sense of accomplishment</li> </ul>
Girls' non-participation in ESPE	<ul style="list-style-type: none"> <li>• Lack of skill and ability</li> <li>• Low self-esteem</li> <li>• Concern for physical appearance (sweating)</li> </ul>	<ul style="list-style-type: none"> <li>• Lack of skill and ability</li> <li>• Lack of accomplishment</li> <li>• Coeducational classes</li> </ul>
Boys' non-participation in ESPE	<ul style="list-style-type: none"> <li>• Lack of skill and ability</li> </ul>	<ul style="list-style-type: none"> <li>• Lack of skill and ability</li> </ul>
Girls' participation in HSPE	<ul style="list-style-type: none"> <li>• Socialize with friends</li> <li>• Interest in sport</li> <li>• Competitive aspect</li> <li>• Break from classroom</li> </ul>	<ul style="list-style-type: none"> <li>• Socialize with friends</li> <li>• Past background in sports</li> <li>• Improve body image (fitness)</li> </ul>
Boys' participation in HPSE	<ul style="list-style-type: none"> <li>• Competitive aspect</li> <li>• Break from classroom</li> </ul>	<ul style="list-style-type: none"> <li>• Competitive aspect</li> <li>• Break from classroom</li> <li>• Opportunity to be active</li> </ul>
Girls' non-participation in HSPE	<ul style="list-style-type: none"> <li>• Concern for physical appearance (sweating)</li> </ul>	<ul style="list-style-type: none"> <li>• Concern for physical appearance (sweating)</li> <li>• Competitive aspect</li> </ul>
Boys' non-participation in HSPE	<ul style="list-style-type: none"> <li>• Lack of skill and ability</li> <li>• No interest in PE curriculum</li> </ul>	<ul style="list-style-type: none"> <li>• Lack of skill and ability</li> <li>• No interest in PE curriculum</li> <li>• Lack of accomplishment</li> </ul>

## Appendix L

Table 8

*Cross-Case Analysis of PE Activity Preferences Theme*

Case Topic	Case	
	Female PETE Students	Male PETE Students
PA and sports liked by girls in ESPE	<ul style="list-style-type: none"> <li>• Individual activities</li> <li>• Team sports</li> </ul>	<ul style="list-style-type: none"> <li>• Individual activities</li> </ul>
PA and sports not liked by girls in ESPE	<ul style="list-style-type: none"> <li>• Rough sports (i.e. sports that involve physical contact)</li> </ul>	<ul style="list-style-type: none"> <li>• Team sports</li> </ul>
PA and sports liked by boys in ESPE	<ul style="list-style-type: none"> <li>• Individual activities</li> <li>• Team sports</li> </ul>	<ul style="list-style-type: none"> <li>• Team sports</li> </ul>
PA and sports not liked by boys in ESPE	<ul style="list-style-type: none"> <li>• Individual activities</li> </ul>	<ul style="list-style-type: none"> <li>• Individual activities</li> </ul>
PA and sports liked by girls in HSPE	<ul style="list-style-type: none"> <li>• Individual activities</li> <li>• Low intensity activities</li> </ul>	<ul style="list-style-type: none"> <li>• Individual activities</li> <li>• Low intensity activities</li> </ul>
PA and sports not liked by girls in HSPE	<ul style="list-style-type: none"> <li>• Sports which require equipment</li> <li>• Rough sports</li> </ul>	<ul style="list-style-type: none"> <li>• Coeducational team sports</li> <li>• High intensity activities</li> <li>• Traditional male sports</li> </ul>
PA and sports liked by boys in HSPE	<ul style="list-style-type: none"> <li>• Team sports</li> </ul>	<ul style="list-style-type: none"> <li>• Team sports</li> </ul>
PA and sports not liked by boys in HSPE	<ul style="list-style-type: none"> <li>• Individual activities</li> </ul>	<ul style="list-style-type: none"> <li>• Individual activities</li> </ul>