Biological Differences or Social Constructions?
The Entanglement of Sex and Gender in Health and Physical Education

by

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Abstract

Increasing concern over the wellness of young people has placed an increased emphasis on health and physical education as part of the schooling process for young men and women (13–18 years). An increasing number of policies have been implemented in schools in a consorted effort to address student wellbeing. This dissertation explores the discourses that shape the experiences of young men and women in secondary school. Specifically, I explore biological assumptions and social behaviours of young people which influence their eating behaviours and physical activities. Using a biopedagogical theoretical perspective combined with a sex and gender framework, this analysis engages with the complex relationships between biological understandings and resulting social behaviours with the intention of determining whether or not one is a predictor or resistor of the other. Data collection occurred in three phases (interviews with participants in policy implementation and dissemination, focus groups with secondary students, and policy analysis) and was conducted in a public school board in the Greater Toronto Area. I demonstrate that young people’s own understandings of about natural biological differences between young men and women are reinforced and (re)produced in social behaviours. Dominant discourses and constructions about sex and gender create binary categories and give rise to behaviours which impede the experiences and expressions of some young men and women. This research demonstrates the need to understand sex and gender as a continuum instead of binary categories. This would broaden the expressions of eating behaviours and physical activities for both young men and women.
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CHAPTER 1: INTRODUCTION

The focus of major health policies initiatives within Western societies has been goaded from concerns over young people’s inactivity, poor eating behaviours, and reputed sharp rise in obesity. A crucial contribution to the health promotion and policy has been the identification of the positions of public policy and societal structures in shaping the health of large populations, especially those that are most vulnerable (Kickbusch, 2003). A plethora of policies have been created by governments to assist young people in losing weight by becoming more active and developing healthy eating behaviours inside and outside schools (Harwood & Wright, 2012). Intertwined is the belief that individuals and populations can engage in activities to increase their control over the determinants of health (Nutbeam, 1998). Contrariwise, the “new health imperatives” surrounding “eating well,” regular exercise, and monitoring individual bodies have underlying moral overtones and may be difficult for young people to contest or resist (Harwood & Wright, 2012). These health imperatives are gathered, deciphered, and reconfigured within schools.

Schools are institutions of governance and pedagogy, where young people receive messages about how they can become responsible, productive citizens and avoid becoming a burden on society (Burrows & Wright, 2007). Schools are seen as an ideal site for developing and implementing large-scale interventions or health imperatives because they are holding pens for large numbers of young people (Burrows & Wright, 2001; J. Evans & Davies, 2004; Gard & Kirk, 2007). During times of war, schools were instrumental in shaping young men’s bodies in preparation to fight, while young women were taught self-control and restraint in preparation for hard economic times (Azzarito, 2009). During the First World War, almost 82% of American soldiers were rejected from military service due to poor physical conditioning, which resulted in the institutionalization of mandatory physical education in schools as a reactionary approach to the physical state of American youth (Griffin, 1982; Smith Maguire, 2007). Within Canada, the Strathcona Trust was the first documented effort by the federal government to implement physical fitness within the school curriculum. The program placed emphasis on the utilization of exercises typically used in military training (Kidd, 1996; Rutty & Sullivan, 2010). Although later repealed, the National Fitness Act of 1943 was recreated as a response to lack of physically fit candidates for the Canadian military (Houlihan, 1997). During the recruitment campaigns for
Canadian soldiers for the Second World War, officials estimated that one third of the recruits would be denied or rejected because they could not pass the physical fitness requirements (J. West, 1973). The response of the Canadian government towards physical fitness was to combine the militaristic approach with an educational approach which encompassed the evaluation of the health of citizens (J. West, 1973). As a result, approaches to physical education, physical activity, and sport within schools in Western culture were militarized, “heavy, ponderous, meticulous and constant power regimentations” (Foucault, 1980b, p. 58). The concern over the health and physical fitness of children and adolescents was driven by military resource concerns rather than for their general well-being. This is concerning because schools are institutions outside of the home which assist in the development of youth. In Ontario, the early health and physical education curriculum focussed on building physical and mental endurance through the use of militarized drills which reinforced British colonial discourses and create a particular disciplined subject. The use of militarized drills did not align with ideas young women’s feminine beauty and grace (Lenskyj, 1983). Instead a separate curriculum of calisthenics, games and songs were used for the young women’s education (N. Francis & Lathrop, 2011). Adoption of divergent curriculum for young men and women occurred early in Ontario with young men learning military drills (tactics and marching formations) and young women using light calisthenics and exercises to improve their posture and grace (N. Francis & Lathrop, 2011; Ryerson, 1865). Egerton Ryerson, Upper Canada’s first superintendent, created a physical education training manual which suggested:

> girls neither require the same robust exercise nor rough sports, to develop their frames and fit them for the duties of life… light dumb bells are best calculated, if properly used, to strengthen the arms and expand the chest. The long backboard is also well calculated to expand the chest and give litheness and grace to all the movements of the arms and bust (Ryerson, 1865, p. 116).

This early adoption of separate curriculum created a dichotomy of curriculum and delivery of programs at the very beginning of physical education in Ontario which has lingering effects in its present day implementation.

When war is not an immediate concern, Kidd (1999) suggests the economic benefits of physical education and physical activity in terms of cost savings to the Canadian health care system or the establishment of safe communities are driving factors towards implementing physical education in schools. However, the nature and quality of physical education may turn
some children “off” engaging in the program. The current emphasis and focus on competitive sports in physical education creates more opportunities for students to “fail” or “not get picked for the team” rather than opportunities to “win” or feel empowered (Kidd, 1999). This may discourage students from participating and consequently demitting from a physical education program when it is no longer compulsory in schools.

In recent years, the media, politicians, government agencies, and researchers have raised concerns over the current health and body shapes of young people, which has put health and physical education in the spotlight (Active Healthy Kids, 2012a; CBC News, 2009; Hodgson, 2012). Fear over an “obesity epidemic” has been propagated in the minds of the public through a number of vehicles and has changed the presentation of health and physical education policies in schools (J. Evans, Davies, & Wright, 2004; J. Evans, Rich, Davies, & Allwood, 2008; Gard & Wright, 2001). A Statistics Canada report suggests the prevalence of obesity in children has increased 2.5 times between 1978 and 2004. For youth aged 12 to 17, obesity levels have tripled during the same time period (Shields, 2006). A more recent Statistics Canada report states for youth aged 12 to 17, the prevalence of obesity as 9.6% for girls and 10.7% for boys while the girls and boys are who classified as overweight are 20.9% and 18.9% respectively (K. Roberts, Shields, de Groh, Aziz, & Gilbert, 2012). Although data used for documenting the “obesity epidemic” are over 30 years old, concern over the “epidemic” is a relatively new phenomenon and corresponds to neoliberal discourses (Gard & Wright, 2005). Media and health professionals often refer to past generations as being more active and eating well as the foundation to their arguments that “modernity” and current “Western lifestyles” are making people “fat” (Gard & Wright, 2005). The message relayed by health professionals and media is that Canadian youth are eating too much and not engaging in enough physical activity (Active Healthy Kids, 2012a; Branswell, 2012). Parents are often blamed for not monitoring and regulating their children’s bodies to prevent them from being overweight or obese (Crowe, 2011; Plakas, 2012). In the fight against obesity, the body is presented as a machine, and the balance of calories in versus calories out determines a person’s body shape and size (Gard & Wright, 2005). Youth are often classified as being unable to monitor their behaviours, and therefore the responsibility shifts towards the parents and schools (Kirk & Spiller, 1994). This has changed the focus of physical education from having fun to burning calories (Gard & Wright, 2005).
Recent media reports suggest over 31% of all Canadians aged 5 to 17 years old are overweight or obese (Crowe, 2011). Dan Hancock, the Alberta minister of education, addressed a healthy school conference stating that “we’re educating the first generation of young people who may not outlive their parents” (McMahon, 2011). The president of the Ontario Medical Association (OMA) recently released a statement echoing this sentiment (Ontario Medical Association, 2012). However, these quotations are drawn from a study and misrepresent the authors’ findings that obesity may shorten the life expectancy of the current generation, not that children may die before their parents (Olshansky et al., 2005). Furthermore, a recent study exploring global life expectancy concluded that the life expectancy for men and women has increased in most countries, which challenges the idea that obesity is a global epidemic and influences global morbidity (Salomon et al., 2012). The media and government officials fuel the panic for the “obesity epidemic" in an effort to give relevance to the coverage and government policies (Gard, 2009). With the new educational focus on preventing obesity, health and physical education and educational health policies have garnered a lot of attention because the policies are thought to be vehicles to protect children from becoming victims of obesity (McDermott, 2007).

As a result, public health organizations have demanded action by the provincial governments to create policies such as the banning of foods or measuring body mass index, which monitor and regulate students’ behaviours and bodies (De Francesco, 2010).

Schools are thought to be on the front lines in the “war on obesity.” By declaring war on obesity, it creates a sense of urgency to take action and justifies the action of abridging civil liberties by governments and other agencies (Saguy & Riley, 2005). Multiple media sources have taken up the issue of childhood obesity (Hammer & Baluja, 2012; OPHEA, 2011). In May 2012, The Globe and Mail published a three-part series about the use of schools on the “war of childhood obesity” (Hammer & Baluja, 2012). The series focused on the need for more physical activity integrated into school policy and curriculum throughout elementary and secondary schools. Schools are described as vital to the obesity solution because students are captive audiences and enforcing physical activity will ensure students are being physically active every day. The series also emphasizes the important role schools play alongside parents in assisting students in developing a healthy lifestyle (Hammer & Baluja, 2012).

Politicians frequently use schools as a venue to tackle childhood obesity. The leader of the Ontario New Democratic Party, Andrea Horwath, demanded that the provincial government take
action against childhood obesity by making physical education mandatory until Grade 12 despite her adverse reaction to the subject. Horwath stated, “I hated phys-ed in school but it's something that I had to do, whether I hated it or not” (Canadian Press, 2012). Despite her dislike for the subject, Horwath views physical education as a requirement to solving the childhood “obesity crisis.” Rather than changing the pedagogy or structure of physical education courses to encourage enrolment, the view of many is to mandate physical education so it is a requirement. The need to mandate physical education is also frequently cited in the Active Healthy Kids report card as a necessary requirement to improve children’s health (Active Healthy Kids, 2012b). In May 2012, Deb Matthews, the Ontario Minister of Health put together a 17-member expert panel to develop a strategic plan to tackle childhood obesity and the role of schools in the plan (Ferguson, 2012). However, the panel did not include any past or present physical education teachers or school administrators (Ministry of Health and Long-Term Care, 2012). This may limit the panel’s understanding of the educational issues as well as implementation issues surrounding any recommendations created by the panel.

In the current neoliberal climate, critical physical education and physical cultural scholars scrutinize the explicit and implicit healthism discourses (Crawford, 1980), biopedagogies (Harwood, 2009; Kirk, 2006a; Tinning & Glasby, 2002; Wright, 2009) the conception of health and physical education policies and interventions that have become medicalized and health based (S. Alexander, Frohilch, & Fusco, 2014; Burrows & Wright, 2001, 2004, 2007; J. Evans et al., 2004; Kehler & Atkinson, 2010; Petherick, 2011; Rich & Evans, 2009a), and the incorporation of “new health imperatives” in schools (J. Evans, De Pian, Rich, & Davies, 2011; Harwood & Wright, 2012; Rich, 2011; Rich & Perhamus, 2010).

In Ontario, educational policies have been created to monitor students’ bodies, to enlist physical education classes; to get students fit; cafeterias to monitor and serve healthier foods; and curriculum to warn students of the dangers of obesity (McMahon, 2011). In the past 10 years, new Health and Physical Education Curriculum has been developed along with four different school-wide physical activity and nutrition based policies in Ontario elementary and secondary schools (Ministry of Education, 2015a). These policies include the School Food and Beverage Policy (2011) which outlines all nutrition standards for food and beverages sold in schools; the Daily Physical Activity in Elementary Schools Policy (2005) outlines the requirements for 20

This research is an interdisciplinary analysis of physical education policies in an attempt to uncover the reasons for the decrease in physical activity levels despite attempts by schools to expand the opportunities to be physically active within the confines of the school environment. Through policy analysis, key informant interviews, and student focus groups, the purpose of this research is to examine what assumptions of sex and gender mediate health and physical education policies, programs, and pedagogical practices and how biopedagogies impact the (re)production of gendered identities and foster social capital. Specifically, the focus is on Ontario health and physical education policies in secondary schools. From a sociocultural perspective, the analysis evaluates the policies from a physical cultural studies perspective and a biopedagogy lens to understand the differences in interpretation, actualizing, and experiences of the policies by young men and young women while using feminist physical cultural studies as a method for critical analysis. Furthermore, this research analyzes the implications that come from sweeping generalizations and neoliberal foundations which are used to inform policy and school based decisions. From an educational perspective, the information gained through this research can be used to inform future policies and question whether the current policies are suitable for all individuals regardless of their sex or gender. This research focuses on providing insights into what considerations are missing when developing physical education policy and the unintended and unhealthy consequences of neoliberal policy that may limit policy effectiveness and influence. This research may assist in understanding the decreasing enrolment levels of young men and women in health and physical education courses once it is no longer a mandatory requirement. Finally, this research may contribute to current gaps in theory in biopedagogy and health and physical education classes that can be used to inform future policy, programs, and pedagogy.

My interest in this issue stems from a number of different sources. First, my work as a secondary school teacher has instilled a passion for developing policies and programs which are inclusive and effective for all students. Second, my Master of Education thesis examined the retention of health curriculum and sparked interest to inquire further into this issue. Researching issues on health and physical education policies in Canadian schools allows me to educate myself as well as others, which may inform my own teaching practice as well as others’.
The Context of This Research

Health and physical education programs and policies within schools run on the premise that as individuals become more knowledgeable about behaviours such as physical activity or nutrition, they will engage in behaviours that will lead to their own better health (Seedhouse, 1997). The idea that knowledge leads to a change in behaviour or attitude is embedded in the curriculum content and pedagogy of school physical education programs (Kelly, 1998; Lupton, 1999). For young people, the attainment of knowledge may not be considered feasible, thus requiring the government to impose policy to regulate health behaviours.

Schools are heavily implicated in constructing particular social meanings which influence individuals’ identities in relation to health and academic performance (J. Evans et al., 2008). Natural differences may be speculated or justified between young men and women concerning their health behaviours and ideas surrounding their bodies through the production of disciplined bodies (Foucault, 1977; van Amsterdam, Knoppers, Claringbould, & Jongmans, 2012). The creation, interpretation and delivery of physical education policies may assist in producing bodies that reproduce ideas surrounding appropriate behaviours for young men and women.

Sex and Gender and Their Intersections

Cell and society are inextricably entangled in everyday life (Oliffe & Greaves, 2012). “Every cell has a sex” (Wizemann & Pardue, 2001, p. 4), and every person is gendered in some form, which makes it significant that sex (biological characteristics) and gender (socially constructed factors) are explored in research (Greaves, 2012). The explicit intersection of sex and gender and its relevance for health and physical education is important to consider because it is difficult to separate the influence of sex and gender on and with experiences in physical education. In quantitative and qualitative literature, sex and gender are often used interchangeably. Sex may be mistakenly substituted for the gender, so when reporting sex differences, the researchers may in fact be reporting gender differences (J. Johnson, Greaves, & Repta, 2009). Sex and gender may also be used interchangeably in educational research, which may in turn be used to define and outline school policies (Jackson, 2010; Mullally et al., 2010). It is important that the two terms are clearly defined to prevent misinterpretation. Johnson et al. (2009) define sex as “a multidimensional biological construct that encompasses anatomy, physiology, genes, and hormones, which together affect how we are labeled and treated in the
world” (p. 3). In the context of health and physical education, sex-based differences can impact muscle mass, hormone levels, body fat percentages, et cetera.

Gender “is a multidimensional social construct that is culturally based and historically specific, and thus constantly changing. Gender refers to “the socially prescribed and experienced dimensions of ‘femaleness’ or ‘maleness’ in a society” (J. Johnson et al., 2009, p. 3). Gender differences can be used to describe differences in clothing choices or the type of physical activity an individual may choose to engage in. Young men and women do not live as sexed individuals one day and gendered persons the next; sex/gender is experienced in an interlocked manner (Krieger, 2003). The biological body helps to understand the social relations but is not independent from them (Penney & Evans, 2002). Shilling (1993a) suggests the body is an unfinished biological and social phenomenon which is transformed within certain limits, as a result of its entry into, and participation in society. It is this biological and social quality that makes the body at once such an obvious, and yet such an elusive phenomenon. (p.13)

In some contexts there are inherent shortcomings of traditional or commonplace conceptualizations of gender that are often reduced to simplistic or singular characteristics or traits rather than complex socio/biological processes (Penney & Evans, 2002). Connell & Messerschmidt (2005) state:

Bodies are involved more actively, more intimately, and more intricately in social processes than theory has usually allowed. Bodies participate in social action by delineating courses of social conduct — the body is a participant in generating social practice. It is important not only that masculinities be understood as embodied but also that the interweaving of embodiment and social context be addressed. (p. 851)

Masculinity and femininity operate within a social context and are not something that someone possesses or does not, nor is it something that increases or decreases (Butler, 2004; Connell, 1995; Connell & Messerschmidt, 2005; Gard, 2006; Mac an Ghaill, 1994; Tischler & McCaughtry, 2011). A. Hargreaves (1994) suggests “there is a widespread assumption that all girls and women have a set of characteristics which is constant and common to them as females, and which is distinctly different from the set of characteristics common to boys and men” (p. 147). The unitary conceptions of gender are highly problematic because “they serve to deny or conceal commonalities in the characteristics and experiences of some men and some women, but also ignore the diversity in the characteristics and experiences of men and women” (Penney & Evans, 2002, p. 14). The identities of men and women are inevitably inextricably bound or
related, and research analysis is not complete if it ignores the relational elements of masculinity and femininity (Penney & Evans, 2002). The establishment of a two-sex system is ideological rather than natural (Fausto-Sterling, 2000). Butler (1990) observes the “the body is not a ‘being’, but a variable boundary, a surface whose permeability is politically regulated, a signifying practice within a cultural field of gender hierarchy” (p. 139). Individual bodies are inscribed with meanings which are fluid and constantly changing. Butler suggests the embodiment of gender can be considered a performance which is embraced by an individual. The performance of gender is assigned through repetition of actions that constitute an individual as masculine or feminine. Although individuals may have individual agency within the fluid meanings of gender, boundaries do occur through discourses and power conditions over which an individual may have no control (Butler, 1990). This perspective of power relationships can be used to understand how policies set the limits and pressure on the context within which sex and gender behaviours are actualized.

Penney and Evans (2002) suggest that we all have multiple identities that masculinity and femininity express and reflect. Furthermore, the understanding of multiple identities draws attention to inherent shortcoming of generalized physical education policies, practices, and programs that are directed towards young men or young women as if they were two distinct and homogenous groups (Penney & Evans, 2002). It is important that issues surrounding health and physical education policies examine how sex and gender are intertwined and influence the physical education experience.

**Ontario Physical Education Policies**

In Canada, the provincial legislatures have jurisdiction over education and therefore develop the school curriculum and legislate all educational policies which are unique to each province (Forsey, 2012). Typically, a Minister of Education is appointed by the sitting government and is the figurehead for each province’s Ministry of Education. In the past 15 years in Ontario, there have been nine different Ministers of Education between Progressive Conservative and Liberal governments (Legislative Assembly of Ontario, 2012).

The 72 publically funded school boards in Ontario are responsible for implementing all Ministry of Education programs and policies. Together, these boards operate 4,900 elementary and secondary schools with over 2 million students enrolled (Ministry of Education, 2014).
The Ontario government has implemented health and physical education policies in the past 10 years to increase young people’s physical activity levels. Policy No.138, *Daily Physical Activity in Elementary Schools, Grades 1–8* (2006), was enacted in schools, which required schools to provide all students with opportunities to participate in a minimum of 20 minutes of sustained moderate to vigorous physical activity during instructional time (Ministry of Education, 2005; Ontario Ministry of Education, 2009).

Health and physical education class is mandatory for all students until Grade 9. In 2010, the Liberal government modified the Ontario physical education curriculum for Grades 1–12. The previous edition of the physical education curriculum was published in 1998 by the reigning Conservative government. Concerns from parents and religious groups about the sexual health content delayed the release of the 2010 curriculum and resulted in the government releasing an interim curriculum until the concerns could be addressed for a final report (Blaze Carlson, 2011). A finalized version of the health and physical education curriculum was implemented in September 2015, which was updated from curriculum implemented in 1998 and 2010 (Do, 2015; Ministry of Education, 2015b).

The Ontario government has also legislated health and physical education policies which have focused on the eating behaviours of young people in schools. Policy 135 *Healthy Food and Beverages In Elementary School Vending Machines* (2004) limited the food and beverages sold in vending machines in elementary schools in Ontario (Ministry of Education, 2004). Vending machines selling restricted items such as carbonated drink, and chips were replaced with items such as milk, yoghurt-based drinks, water, juice, and granola bars. The Ontario government introduced the *Healthy Food for Healthy Schools Act* (2008) and the *Trans Fat Regulation* (2008), which limited the types of food that could be sold on school premises (Ministry of Education, 2008; Ontario Ministry of Education, 2013). Any baked goods, packaged snack food, or deep-fried foods could not be sold if they did not fall within the regulated amount of trans fat. In 2010, the Ontario government passed *Policy 150 School Food and Beverage Policy* (2010), which applied standards to all food and beverages that are available in all Ontario elementary and secondary schools. The standards limited the amount of salt, fat, caffeine, sugar, et cetera which could be present in a food or beverage (Ministry of Education, 2010b). The policy also states that food should be prepared in a “healthy way” which require little or no added fat or sodium such as baking, boiling, barbequing, et cetera. Each school is allowed 10 days a year
which would be exempt from the nutrition standards outlined by the government (Ministry of Education, 2010b). The Ontario government suggest that the implementation of the policy will contribute to “reducing students’ risk of developing serious, chronic diseases such as heart disease, type 2 diabetes, and certain types of cancer” (Ministry of Education, 2010b, p. 2) by limiting access to “unhealthy foods.”

Collectively the above polices contribute to the Ministry of Education’s Healthy Schools Strategy to assist in supporting student learning and growth through daily activity and proper nutrition. A 2013 Auditor General of Ontario report stated the Ministry of Education spent approximately $4 million annually from 2009 to 2012 on activities related the Healthy Schools Strategy (Lysyk, 2013). The Ministry is currently developing measurable objectives and related performance indicators for this strategy (Lysyk, 2013).

Within Ontario, policies have been created to address the new health imperatives, but the actualization and implication of these policies need to be understood in terms of the sex and gender and the subjectification on young people as well as their acceptance or resistance.

**Research Objectives**

Using a qualitative approach, the purpose of this research is to present, describe, investigate, and critically assess how assumptions of gender, sex, and their intersection mediate Ontario’s Healthy Active Living (HAL) and Health and Physical Health Education (HPE) policies, curriculum, programs, and pedagogical approaches, and impact on the understandings and experiences of secondary school principals, instructional program leaders, teachers, and students in Grades 9 to 12. This study draws conclusions as to the impact sex and gender and their intersections have on the actualization of HPE/HAL policies. Specific objectives of this research study include:

1. To uncover the assumptions of sex/gender that impact the translation of government HPE curriculum and HAL policies by secondary school officials, principals, and teachers;
2. To explore the extent to which sex and gender differences are reproduced in school-based physical culture and what impact this may have on the experiences and understandings of students in physical education and school-based activity programs;
3. To unpack key neoliberal and biopedagogical discourses mediating policy;
4. To examine the impact of recent policies and curriculum on physical activity levels within school settings;
5. To uncover how official and unofficial curricula re-produce gendered identities, foster social capital, and social inclusion; and
6. To offer policy and curriculum recommendations to enhance gender equity and promote an inclusive culture of physical activity.

In order to accomplish the research objectives, the research was divided into three stages, including policy analysis, focus groups, and one-on-one interviews. In total, 95 participants were a part of this research project. There were 83 participants in the focus groups and 12 one-on-one interviews. Data collection occurred between April 2013 and June 2013. Students in the focus groups ranged in age from 14 – 18 years old. Participants in the interviews ranged in age and years of experience.

**Significance**

This research extends approaches to critical pedagogy by synthesizing and adapting emerging approaches to biopedagogy and the entanglement of gender/sex in school-based activity. This research addresses gaps in the understanding of how HPE and activity-based curriculum and policies “school the gendered body” and question the influence of neoliberal forms of gendered student engagement. Physical activity levels of young men and women have declined, despite expansion in HPE and other activity-based policies across Canada (J. Barnes, Colley, & Tremblay, 2012). Specifically, this research suggests reasons for the decrease in engagement of both young men and women in HPE. In doing so, policy recommendations are made at the provincial, local school board, and school research site levels to foster gender equity, active student engagement, and social inclusion in action-oriented education settings.

**Overview**

In the introduction, the health and physical education policies that have been implemented within Ontario to counteract an obesity epidemic have been briefly described. Given the brevity of scholarly writing on issues within the field of health and physical education and concern over the health and wellness of young people, many consider these to be relevant and important within the field. However, little attention has been given to the intersection of sex and gender in the actualization of the policies. Using relevant literature, I will build a case for the
need to understand how assumptions and expectations made about biological sex are associated with gendered behaviours within the field of health and physical education.

In the second chapter, central theoretical writings used to inform this dissertation are presented along with a review of the foundational literature. The primary focus is the use of biopedagogy and healthism to examine the biological and gendered assumptions that are embodied subjectivities by young men and women through health and physical education discourses. Additionally, key research terms, categories, and findings are articulated prior to their use in subsequent chapters.

The third chapter outlines the methodology used in this research study. A lengthy discussion is presented about the epistemological assumptions used in this dissertation to collect, analyze, and discuss the data. My reflexivity, positionality, and ethical considerations as a researcher are also offered as considerations in this study. The end of the chapter details the technical aspects of the research methods.

Chapter four presents the data concerning nutrition policies within Ontario secondary schools. In this chapter, findings exploring the purchasing of food, internalizing of nutrition knowledge, and the establishment of eating practices within the school environment with an understanding of deeply held beliefs about sex and gender located within the school and social environment that (re)produce sex and gender binaries are presented. Specifically the chapter presents findings about knowledge surrounding nutrient requirements, financial considerations for food requirements, and concludes with discussion surrounding concerns over social image.

In chapter five, the intersubjective and intrasubjective implications ascribed to health and physical education practices and performances through deeply held beliefs by teachers and students about sex and gender contextualized in the realm of health and physical education (re)produce sex and gender binaries while establishing expectable or desirable physical activity performances. These sex and gender binaries translate into distinctions in the structure of the class, types of activities offered, differences in rules, and acknowledgement of athletic ability.

The final presentation of findings occurs in chapter six with the illumination of sex, gender, and their intersections through divergences in expectations and evaluations between young men and women as a result of biological assumptions, ensuing social behaviours, and dominant culture. The divergence is made evident through interactions with peers and teachers, academic achievements within health and physical education classes, and the school culture and
climate. This chapter explicitly explores: the differences in expectations of teachers and peers towards young men and women in health and physical education class; the elusion of academic success and declining enrolment; and the broader athletic culture of the school and the differences in cross-curricular rules established by the provincial governing body.

The final chapter provide details about major contributions to research as well as policy recommendations and considerations for the health and physical education inside the classroom, broader physical culture of the school, and extracurricular programs. Limitations to the data are also explored, with contextual information of the study. Finally, future directions for health and physical education policies, programs, and pedagogies are discussed at length with the intention of creating a more inclusive educational environment.
CHAPTER TWO: LITERATURE REVIEW

The review of the literature in this chapter displays the need to conduct research in the field of sex, gender, and their intersections within the context of health and physical education. Drawing from sociological, educational, anthropological, and physiological literature, the interrelationships of policy, pedagogy, and programs are revealed. This review examines the production of knowledge, physical education pedagogy, shifting focus of health and physical education policy, the establishment of biological sex and societal gender. The chapter concludes with a discussion of the theoretical principles of biopedagogy and biopower.

Schools and Health and Physical Education

School physical education is a considerable site in the cultural (re)productions for the notions of physical activity and health (J. Hargreaves, 1986; Kirk & Colquhoun, 1989; Kirk & Tinning, 1990; Penney, 1998; Rich, 2011). In addition, Penney & Evans (2002) suggest the experiences that girls and boys receive in physical education are likely to reinforce stereotypical images, attitudes and behaviours relating, amongst other things, to how they should feel about their own and other’s bodies, who can legitimately participate in what physical activities, when and why. (p.4)

Studies of physical education have examined the role of schools in defining what constitutes a healthy body. Research has focused on; the social construction of the body: (Kirk, 1994; Wright, Macdonald, & Burrows, 2004; Wright, O’Flynn, & Macdonald, 2006), gender expectations (D. Brown & Rich, 2002; J. Hargreaves, 1998; L. Hills, 2006; Penney & Evans, 1999; Scraton, 1986; van Amsterdam, et al., 2012; Vertinsky, 1992; Wright, 1995) and disciplinary practices of physical activity and health practices (J. Evans & Davies, 2004; Gard, 2011; Kirk, 1994, 2001).

Schooling can be considered a civilizing process through which children and adolescents are conditioned to following outlined learning expectations. Elias (2000) suggests “schooling has historically been implicated in ‘civilising’ the bodies of children: the physical capacities and appearances of each new generation undergo development and disciplining in schools” (cited in Shilling, 2004, p. xv). These “civilized” standards “are not neutral or universal, but reflect the specific norms and expectations of societies at articular stages in their development” (Shilling, 2004, p. xv). Dominant social institutions have a personal stake in the inclusion or exclusion of knowledge and behaviours within education policy and curriculum. Because of the self-
discipline and development that is encouraged by participating in sport, children and adolescents are less likely to engage in “deviant” social behaviours (Donnelly & Kidd, 2003). Athletic participation is also associated with fewer incidents of drug use, smoking, unwanted pregnancy, delinquent behaviour, and dropping out of school (Donnelly & Kidd, 2003; Kerr, 1996). Sport and physical activity may also enhance other citizenship values such as self-responsibility because of its representational status or respect because of the ethics behind fair play and adherence to rules (Donnelly & Kidd, 2003). Not all aspects of sport may divert from “deviant behaviours.” Sport as physical activity in schools may be considered as conducive to the arousal of violence and aggression because of the underlying competitive nature (Dunning, 1986, 1999). However, through physical education classes, students may learn the socially acceptable manner to deal with the violence and aggression so that sporting encounters outside the school environment are safer and more positive. Thus, the sharing of knowledge is guided by institutional ideologies and policies which function to produce productive citizens who follow societal norms. In Canada, school policies are created by the provincial government and may reflect social, cultural, and political issues and norms at the time of implementation. Therefore, schools need to be examined to understand how governmental discourses are created and dispersed to influence the population.

The creation of productive citizens who understand and follow the established societal norms is achieved through the discipline of student bodies through the schooling process. Critical approaches of schooling examine the reproduction of the social, economic, and political frameworks that govern bodies and institutions. Ball (1990) suggests a Foucauldian approach can be used to understand how bodies are disciplined through constitutive practices of regulation and normalization originating from various school subject areas. Gastaldo (1997) suggests that the health education promoted in schools focuses on empowering people to control their own health and prevent disease. Health education focuses on exercise, food, and the risks of smoking or drinking, and the underlying principle is that the healthy choice is the only choice (Seedhouse, 1986). School subject areas develop technologies specific to their subject to reproduced the knowledge required to achieve social success, thus normalizing the learning patterns and educational requirements.

Physical education has evolved over time and has been influenced by institutions that determine the included knowledge within the official curriculum and policies. A shift has
occurred from an emphasis on military training and calisthenics to games and play followed by an emphasis on fitness and healthy active living discourses (J. Evans & Davis, 2004a; Kirk, 1992b; Wright, 1996, 2004). More recently, a greater emphasis has been placed on lifestyle modification towards the prevention of disease, which is central to the production of healthy bodies (Burrows & Wright, 2004; Gard & Wright, 2001). Importance is placed on monitoring and regulating one’s body to ensure an individual remains a healthy and productive citizen rather than a burden (Gard & Wright, 2005). However, when changes in physical education have occurred, the people who are most affected by the changes are not consulted before implementation. Students may not be part of the discussion about what changes they would make or how they would design a physical education program which would suit their needs and assist them in developing a healthy lifestyle. Rather, health and physical education policy and programs are reflective of government responses to what they think youth need. There is limited research which provides student voice as the coconstructor of a health and physical education program. This research seeks to contribute knowledge to this research field.

**Schooling the Body and the Production of Knowledge**

A school, through its environment, organization, curriculum, and daily practices, plays an important role in the specific notions of body normality. Students, in their desire to conform to normalized expectations, will consume the instructions to achieve the normalized body that are provided within the school environment (Wright, 2004). Schools as well as health and physical education provide rich sites “for examining specific relations between schooling, the body and identity” (Wright, 2004, p. 23). Schools provide a context for examining how bodies are inscribed with meanings and the role institutions play in constructing particular identities and social practices (Wright, 2004).

Durkheim (1961) recognized the major role schools play in “organizing society” on and within embodied individuals. He suggests that schools could instil the “spirit of discipline” (consisting of a regularity of conduct and an internal obligation to obey) into students, which assists in the reproduction of the moral order of society. If the “spirit of discipline” was properly executed, schooling should produce children who appreciate human dignity, which would in turn assist in contributing to the fullest potential development of humanity (Durkheim 1977). Durkheim (1961) suggests the organization of school rituals and the principles regulating the delivery of school knowledge should help to promote social and individual good by engaging
with desires as well as thought. Collective representation should stimulate moral action and operate on more than an intellectual level so that it has emotional effects to shape the personality of the students (Durkheim, 1961). Through schooling, students learn the acceptable body shape and size for their gender and the actions that need to be taken to achieve the desired body. The moral code ensures that action toward the desired body will ensue after the conclusion of schooling.

Durkheim (1961) acknowledged that schooling is an imposition on students who within the school environment have the social designs imprinted. Durkheim emphasizes the moral order of schooling and the importance of individuals realizing their own potentials. To sustain the order, schools build on children’s preference for habitual action with emotional attachment to others. B. Bernstein (1996) suggests that schools have failed in their duty to society because the organization of power relations and discourses prevents students from feeling as though they have a genuine stake in society, a right to be included, and a right to participate. To apply Bernstein in the context of this research study, students within physical education may feel inclined to follow physical activity or nutrition regimes which have been instilled in them through the schooling process. Furthermore, inspired by Bernstein, this research will question whether students may feel pressure to engage in particular behaviours which are expected of their gender.

Foucault saw institutions, such as schools, as places where the sense of body and self is constituted in and through a wide range of discourses and practices within fields of knowledge, truth, and power (Best & Kellner, 1991). Power exists through “disciplinary practices which produce particular individuals, institutions and cultural arrangements” (Turner, 1997, p. xii). Outside of particular relationships and between social forces, power can be meaningless. It is “localised, dispersed, diffused and typically disguised through the social system, operating at micro, local and government levels” (Turner, 1997, p. xi). Embedded and embodied into the education system, power produces the identities or roles such as “fit” or “unfit” students (J. Evans & Davies, 2004). Furthermore, complex pedagogies of self-transformation and education demand moral order or ethos, which is the underlying principle of “practices of the self” (Besley & Peters, 2007). A code develops by which moral identities are shaped and guided (Turner, 1997). Through education, “via medical professions and the policy rhetoric of governments and their agencies” (J. Evans & Davies, 2004, p. 44), students learn what is involved in being a good
citizen in body and in health. School research may examine the impact of schools in shaping students’ identities in isolation. However, the school environment is just one institution which contributes to a student’s identity. Students interact with different institutions and power relationships outside of the school environment which shape and guide their identities that exist in the school environment. It is important that the impact of media, family, peers, and government is acknowledged when examining students within the school environment. In this research study, it is important to acknowledge the role schools play but also acknowledge that schools do not act alone as sources and influence of power in the shaping of gender identities.

**Critical Studies of Education**

It is important to examine the underlying pedagogy when examining the influence of power or power relations on the shaping of an individual’s identity. A critical educational research approach requires an investigation into how knowledge is produced, refused, mediated, and represented by the existing power relationships (M. Apple, 1999; Freire, 1970; Giroux & Simon, 1989; Kincheloe & McLaren, 2002; McLaren, 1999). Examining the current education system necessitates the critique of discourses within the knowledge production. Critical pedagogy can function as a cultural practice that produces rather than simply transmitting knowledge (Giroux, 1993). Giroux (1993) suggests,

> Critical pedagogy is a deliberate attempt to construct specific conditions through which educators and students can think critically about how knowledge is produced and transformed in relation to the construction of social experiences informed by a particular relationship between the self, others, and the larger world. (p. 98)

In his synthesis of 800 meta-analyses of educational studies spanning 15 years, John Hattie (2008) found that the classroom teacher is the single most variant factor on classroom learning. Therefore, education studies attempting to understand the complexity of knowledge production must examine teachers’ roles in knowledge production and push the boundaries of traditional education studies. When examining the cyclical manner of knowledge production, the pedagogical approach and policy as well as teacher and other staff’s relations with curriculum, policy, and students are important considerations. Inquiry into the relationship of the teachers and other staff has with the curriculum and policies, the connections the teacher and staff make with students, and the ways in which discourses are interpreted, consumed, and resisted by both staff and students is important within critical pedagogy (Giroux, 1993). Teachers and other staff
members within a school may be paramount in the dissemination of educational knowledge and the implementation of policy. Are curriculum and policies merely government documents until the curriculum is taught or policies are implemented and enforced by staff? This research will seek to explore the impact of staff on education policies and whether or not school staff plays integral roles in teaching students to discipline their bodies.

Critical studies in education question the assumptions and structures that are present in the education system, which include pedagogical perspectives (Giroux, 1993; Giroux & Simon, 1989; Kirk, 2006b; McLaren, 1999; Tinning, 2002). Critical pedagogy can be defined as “a way of thinking about, negotiating, and transforming the relationship among classroom teaching, the production of knowledge, the institutional structures of schools and the social and material relations of the wider community, society and nation state” (Giroux, 1993, p. 45). Education is not easily transgressed, altered or, transformed because of its regulatory and dominating nature (M. Apple, 1996; Gore, 1998). Therefore the complexity of educating young adults, along with the restrictions of institutional frameworks which guide the production and dissemination of knowledge, must be considered using the lens of critical pedagogy to incorporate and address the essential components such as the contextual and historical aspects of knowledge production and how system expressions are constructed.

J. Evans and Davies (2004) have been influenced by the work of Basil Bernstein (1990) when understanding how knowledge is contextualized and transformed through communicative practices. Ensuring young people feel they have a stake in society, can be valuable contributors, and can anticipate the results is important in their personal development. Within a physical education context, Bernstein’s work can be useful in inquiring about how “the distribution of power and principles of control in society translate into pedagogical codes and pedagogical modalities in schools; and thereafter, how these codes and their modalities are acquired, shape pedagogic consciousness and, in our terms, are ‘embodied’” (J. Evans & Davies, 2004, p. 207). The notion of embodiment is used by J. Evans & Davies (2004) to understand how forms of knowledge and discourses shape identity and consciousness. This concept can be used to understand the degree to which students may embrace gendered behaviours. Students who embody their gender identity may exhibit certain health and physical activity behaviours and influence their school experience. This research explores the embodiment of gender and its influence on health and physical activity behaviours.
When exploring critical pedagogy, it is important to avoid presumptions of power relations that may exist in some critical pedagogy approaches (St. Pierre, 2000). St. Pierre (2000) suggests, “once a discourse becomes ‘normal’ or ‘natural’, it is difficult to think and act outside it. Within the rules of discourse, it makes sense to say only certain things” (p. 485). Therefore, the curriculum, policies, pedagogy, and intuitive experiences need to be altered substantially before the education of youth can move beyond the relative discourses. Critical pedagogy is committed to understanding transformative practices, which can shift the power relations within a dominant system; feminist pedagogy is sceptical to the replacement of one dominant system with another (Ellsworth, 1994; St. Pierre, 2000). Critical pedagogy seeks to empower individuals or groups in order to emancipate them from unjust or inequitable practices (Kirk, 2006b). The use of sports in health and physical education classes could be considered a form of critical pedagogy. McIntyre (1985) and Siedentop (2002) argue that sports allow for emancipation because of fair and equal treatment, and those who break the rules are given penalties. Furthermore, sports are thought to empower the participants because they allow participants to pursue excellence. However, notions of empowerment require the assumption that power can be possessed and deployed at will (St. Pierre, 2000). Power relationships between teachers, students, and peers within the school environment can impact the use of critical pedagogy. Understanding the power relationships and how power is deployed is important for school-based physical education policies as well as school-based nutrition policies because they can influence the knowledge which is disseminated and the application of the knowledge. The different power relationships within the creation and implementation of education policy will influence how the policies transform from policy into practice.

**The Shift In Physical Education Focus**

The first appearance of physical activity in schools in Western society can be identified as practices of corporeal regulation and normalization that were essential to the emergence and operation of two “institutions of modernity, surveillance (the control of information and social supervision) and capitalism (capital accumulation in the context of competitive labour and product markets” (Giddens, 1990, p. 59). Turner (1984) suggests that economic capital could make a profit from an “accumulation of men and the enlargement of markets only when the health and docility of the population had been made possible by a network of regulations and controls” (p. 161). It therefore became important for a population to be physically strong and fit.
The introduction of physical activity within the school environment ensured that young men and women were being physically active.

Within Canada, organized physical education was thought to be a by-product of urbanization. With more people moving into an urban environment, there was a loss of natural opportunities for children to be physically active (van Vilet, 1965). When Canada was impacted by the depression, there was a decrease emphasis on physical education because it was considered a frill (Robbins, 1990). It was not until World War II with concerns over the general population’s fitness level and readiness for battle that physical education once again became important in the Canadian education system (Robbins, 1990). The initial wave (1933–1957) of physical education was based on the British Syllabus for Physical Training; despite the integration of mental, physical, and spiritual education, the curriculum emphasis was on physical training (Robbins, 1990). The second wave (1957–1972) focused more on competitive and expressive play activities and was heavily influenced by leisure (Robbins, 1990). Physical education in Canada during 1972–1986 was characterized by a state of confusion and disarray. Athletic programs overshadowed instructional programs, and projects from interest groups or federal projects such as Jump Rope for Heart or the Canadian Fitness Awards influenced the structure of curriculum (Haslam, 1988). A lack of satisfaction over the physical education programs resulted in the creation of many community programs, resulting in duplication of services (Robbins, 1990). The third and most recent wave of physical education has been defined by the emphasis on individual skill and performance (Kirk, 2010). This shift in physical education focus has changed the monitoring and regulation of students’ bodies from a population view to a more individual perspective.

Beyond the induction of physical activity in schools, one’s physical appearance became increasingly conflated with self-worth or self-value (Finkelstein, 1991) and defined by class, race, and gender (Gard & Kirk, 2007). By the end of the 19th century, the combination of mass corporeal regulative and normative practices was seen in factories, schools, prisons, and the military (Foucault, 1977). In Western schools, forms of bodily practices and physical activity imitated military style drills and exercises. Students were subject to medical examinations as a part of surveillance of their bodies which were being shaped for social and economic needs (Gard & Kirk, 2007). Students were treated as part of a whole population instead of as an individual whose needs were not put above what was good for society. The practices of corporeal
regulation and normalization required enforcement by teachers and adults to ensure the compliance of students to be skilled and productive workers and, most importantly, good citizens (Kirk, 1999).

By the beginning of the 20th century, “the use of formalized physical activity for the purposes of shaping the docile body was explicitly inscribed in the official discourse of educational policy-makers, manual writers and head teachers of elite schools” (Gard & Kirk, 2007, p. 40). A gradual shift began to occur within the first three decades of the 20th century. The focus on children’s bodies as a whole population shifted to a greater concern on a child’s individual body (Gard & Kirk, 2007). The emphasis of physical education became individualized skill, fitness development, and internal motivation rather than prescribed activities and enforced participation (Kirk, 1992a). The focus on enjoyment of physical activity attempted to develop positive attitudes and lifelong participation (Kirk, 1992a). The fundamental requirement of schools still remained acquiring compliance from pupils to develop skills so they can become productive workers and good citizens (Kirk, 1999). The last three decades of the 20th century were marked with physical culture and corporeal discourses such as a cult of slenderness, regimes of dieting and exercising, and body shaping through medical interventions (Shilling, 1993a). This change in focus made the body an individual project and an entity which needed to be measured and monitored (Shilling, 1993a). These revelations have done little to change the physical education from the model developed in the 1940s and 1950s (Gard & Kirk, 2007). Despite the amount of research being done, the physical educational field has been slow to apply the research in order to implement changes to the policies and practices that are used within the classroom. It begs the question of why the education system is slow to apply the research or what information is being used as the basis of the education policies or practices that are implemented.

Health-related exercise started to emerge in Western countries in the 1970s, which challenged the present sports-based physical education. During this time, there were concerns over the amount of leisure time children were experiencing outside of school time (Robbins, 1990), resulting in physical education practitioners promoting “play” as the basis for physical education (Azzarito, Munroe, & Solomon, 2004; Ennis, 2006). However, the new curriculum had little impact on the way physical education was regarded or the pedagogy of teachers (J. Harris, 2005). The insignificant impact of the new curriculum could be explained by the idea that teachers may use the same teaching methods as how they were taught because it is more
comfortable (Britzman, 1991; Stigler & Hiebert, 2009). Physical education teachers who were coached at elite levels could also teach using the methods ascribed by their coaches (Siedentop & Locke, 1997). As a result, the same pedagogical ideas and practices could be used generation after generation without changes for the new curriculum. This idea was explored in this research study through discussions with teachers and observations of their classes.

In recent years, a shift has occurred in the ways children’s bodies are viewed and regulated. The current physical education model in commonwealth systems similar to Canada places a greater emphasis on health and lifelong learning and is based primarily on a health promotion model and the pursuit of health through the prevention of disease, which is central to the production of healthy bodies (Burrows & Wright, 2004; Gard & Wright, 2001; Gastaldo, 1997).

Media, politicians, researchers, and public health officials often make claims about the shape and size of children’s bodies to support the direction of physical education (Gard, 2011; Gard & Wright, 2001). Kirk (2006a) and Gard (2011) suggest that the careers of some researchers are built on the belief of an obesity crisis impacting today’s youth. To bring attention and validity to their work, researchers have gone as far as equating the obesity crisis to the threat of bird flu or climate change. Paul Zimmet and Garry Jennings (2008) suggest that “obesity is the single most important challenge for the public health in the 21st century.” Zimmet & Jennings further suggest, “we don’t have the luxury of time to deal with this epidemic – it’s as big a threat as global warming and bird flu.” David Ludwig (2007) states, “like global warming, the obesity epidemic is a looming crisis that requires action before all the scientific evidence is in” (p. 2326). These statements are problematic because the comparisons are not possible because no one knows how serious climate change is and, like the obesity “epidemic” there is contradictory research surrounding the topic (Gard, 2011; Gard & Wright, 2005). The comparisons of the two issues may be more of a metaphoric comparison which suggests that, like climate change, policymakers need to prioritize handling the obesity epidemic above all other concerns before it leads to catastrophic, irreparable, and long-term damage to the population and overall way of life (Gard, 2011). Other researchers or the general public rarely challenge the validity or the sources of these statements or comparisons. This is problematic because it contributes to the fear over children being “at risk” and strikes up support for education policies to monitor and regulate children’s bodies.
Coinciding with the call by researchers for political action, political agendas have been produced and surround the idea of large sums of money being spent on interventions and initiatives (Childhood Obesity Foundation, 2012; Gard & Wright, 2005). In the United States, Michelle Obama’s “Let’s Move” initiative was introduced in February 2010 as an attempt to combat childhood obesity by targeting physical education and school cafeterias (Huber, 2012). Obama’s initiative has attempted to implement more physical activity in the school day and make school lunches more nutritious (Huber, 2012; Nixon, 2012). Obama stated that the solution to the childhood obesity problem “doesn’t require fancy tools or technologies” (Appleton, 2010). She further states, “we have everything we need right now — we have the information, we have the ideas, and we have the desire to start solving America's childhood obesity problem” (Appleton, 2010). Obama’s statements suggest that the problem and the solutions are simple, but she fails to acknowledge the legislative politics or school level issues (Gard & Vander Schee, 2011). In Ontario, the former Ontario Liberal leader Dalton McGuinty used childhood obesity as a platform to get his government reelected in 2007. McGuinty promised to ban junk food from schools and require 20 minutes of daily exercise for all elementary school students (Canadian Press, 2007). In his 2011 political platform, McGuinty once again used childhood obesity as an issue, promising a 20% reduction in the number of obese children (Canadian Press, 2011). The continuous use of childhood obesity as an issue by politicians keeps the issue at the forefront of public attention and brings relevance and truthfulness to the issue in the eyes of the public. However media or politicians give little attention to obesity issues such as poverty or access to resources.

Messages claiming a “global obesity epidemic” and parents outliving the current generation of children have propagated fear in the eyes of parents and children (Hilpern, 2002). These attempts of fear mongering by media or politicians are not founded in empirical research. The idea that children would die before their parents is not founded from a published research report; rather it can be traced to William Klish, a doctor in Texas who made a statement to a local newspaper (Ackermann, 2002). With the presence of fear and panic, individuals are less reticent to the implementation of governmental controls over more aspects of their lives, such as banning junk food within the school system. The use of the term epidemic frames obesity as a disease in which every individual is at risk of developing obesity (Gard & Wright, 2005). This ensures that people are more likely to monitor their current weight and lifestyle choices.
Government reports, often endorse the view that “bad biology, psychology and habits, resulting in too little exercise and over indulgence in the pleasures of readily available, cheap, bad food, can be apportioned disproportionately to particular categories of the population” (Rich & Evans, 2009b, p. 162). Schools are being targeted as sites of implementation of policies aimed at solving the childhood “obesity epidemic” as well as sites for monitoring and regulating students’ bodies. What is rarely taken into consideration by media, politicians, or researchers is the voice of the students, who are the targets of school-based policies. Although students are finding new formats and venues such as YouTube and social media, to use their voice, it occurs out of context (Our Future, 2012). This research study attempts to fill that gap by collecting the student voice through focus groups discussing the current physical education policies in Ontario secondary schools and combining it with the students’ experiences which will be observed in the school environment.

The Gendered Body and Physical Education

Physical education has become an important site for the study of the (re)production of gender difference within Western culture because of the regulation and control of the body through the ritualized practices of both sport and physical education lessons (J. Hargreaves, 1986) in combination through the scientific and medical rationales which underlie the practices (Vertinsky, 1990). Vertinsky (1992) suggests that out of all the school subjects, physical education “has been strongly influenced by traditional understandings of ineradicable biological differences between the sexes and the social roles assigned to each sex as a supposed consequence of their biology” (p. 2). M. Hall (1996) suggests physical education classes differ from other subjects because in physical education classes young women often define themselves in relation to young men, which has implications for the physical education classes which should be designed for young women. Unlike other subjects, the expectations for young women may be lower than for young men because of an underlying belief that young women are not as successful as young men at physical tasks (Vu, Murrie, Gonzalez, & Jobe, 2006). For example, an expectation for young men may be for them to complete a distance run in a specific time while the expectation for young women may be just to complete the equivalent or a lesser distance. These differences in expectations are acknowledged by young women and young men and are reproduced in discourses and through their behaviours (Petherick, 2011; Vu et al., 2006; Wright, 1996). Within physical education, attention has focused on the historical patterns of
provision and staffing (J. Hargreaves, 1986; Leaman, 1984; Scraton, 1986, 1987). One study found “for historical reasons, boys and girls are still generally treated according to their sex rather than their potential in all phases of physical education” (ILEA, 1984, p. 82). The researchers gave no clear explanation as to why this assumption has not been questioned by school officials about equity nor has it been explored further in present research. Scraton (1987) suggests that physical education reinforces gender differences overtly in terms of the activities offered and covertly through the attitudes and actions of those involved in the policy and teaching of physical education. The lack of discussion surrounding why these gender differences are accepted and not questioned by staff and students is an issue which will be explored in this study.

Equal opportunity policies implemented in schools have been viewed as a significant advancement to challenging the dominant ideologies of femininity and masculinity (J. Harris & Penney, 2000). However, since the implementation of Title IX in the United States, which afforded young women “equal or similar opportunities” as young men, young women have been characterized increasingly as a problem because of issues such as lack of enthusiasm for the sport-based physical education classes or the lack of skills required for the classes (Flintoff & Scraton, 2001; Wright, 1999). Therefore there must be other underlying issues which cannot be resolved by providing more opportunities.

Deeply entrenched beliefs in Western society suggest young men are “natural” participants in sports and physical activity (Atkinson, 2014). Consequently young men may experience frustration and embarrassment where narrowly defined forms of masculinity are emphasized. Boys who are low skilled or do not perform their masculinity through aggressive or competitive behaviours may be bullied or marginalized (Wright 1999). Young men may have limited options for physical education if they do not want to participate in the traditional, sports-based physical education. Talbot (2017) and Scraton (1993) have emphasized that provision of the same PE programs for all children may not consider influencing factors such as the sex of the teacher, the activities being offered, the pedagogy of the teacher, or the level of competence of the children. In addition, children start as early as primary school developing stereotypical attitudes towards sport and physical education in relation to gender (Schmalz & Kerstetter, 2006; A. Williams, 1993). As a result, young women may be disadvantaged and the experiences of young men may be restricted as a result of the stereotypes which surround physical activity.
The historical objectives of physical education also have pedagogical implications such as differences in the perceptions of physical ability and appropriateness of activities (A. Williams & Bedward, 2002). Physical education classes are the only classes in which the sex of the teacher intentionally aligns with those of his or her students (J. Harris, 1997). This ensures that women are responsible for designing and developing physical education curriculum for young women and men do the same for the young men (J. Harris, 1997). The results from Harris’s study suggest that there is a tendency to view young women and young men as having distinct needs and interests, thus requiring different classes and curriculum. In her study of patriarchal relationships in sport and physical education in British schools, Scraton (1992) found that teachers presented perceptions of biological differences between young men and women. The teachers described different and complementary physical capabilities based on patriarchal assumptions about femininity and masculinity. Young women were described as more poised, quieter, and more in control whereas young men were loud, taller, stronger, faster, and more daring. The young men were the standard or motivation for young women to aim for. The teachers’ perceptions were used to justify the differences in course content and teaching approaches which existed between the young men’s and women’s physical education classes. Berg and Lahelma (2010) in their study of physical education teachers found that both male and female physical education teachers frequently praised the physicality of the male students and suggested differences in abilities between young men and women were natural differences. Furthermore, male teachers’ competence in physical education was evaluated as higher than the female teachers’. The ability of the male teachers to teach girls was never questioned by male or female teachers, but doubt was cast on the ability of the female teachers to teach young men (Berg & Lahelma, 2010). Van Amsterdam et al. (2012) also observed physical education teachers drawing on their knowledge of human sciences and their experiences to construct young men and women as “naturally” different. Young men were constructed as the norm in physical education and “described as strong, active, physically capable, and naturally endowed with the capacities to perform well in sports” (p. 790). Young women’s bodies were seen as the polar opposite. They were “described as passive and failing to meet the standards (set by the boys)” (p. 790) except when the physical educators were talking about activities they considered feminine such as gymnastics and dancing. It is important to acknowledge that teachers’ behaviours, perceptions, and decisions about physical education are not exclusively their own (Penney &
Evans, 1999). “There are powerful and openly political frames to teachers’ thinking and actions, not all of which are easily challenged or deconstructed” (Williams & Bedward, 2002, p.148). Nevertheless, the discourses of naturalness used by the teachers to create categories exemplifies how the teachers normalize the performances of the young men and women in physical education (van Amsterdam et al., 2012).

Sex and gender research impacts the structure of physical education classes because teachers’ perceptions of differences between young men and women have implications for students because teacher may prejudge students’ physical abilities based on their sex and students may feel pigeonholed by expectations. On the other hand, students may demit from physical education if they do not live up to the physical ability expectations for their sex. In addition, teachers may design physical education courses to target girls or boys which may reinforce stereotypes about “appropriate” physical behaviours for young men and women (Schmalz & Kerstetter, 2006). This may in turn persuade some students to choose not to enrol in physical education because the course designed for their gender does not align with their interests.

The differences between the pedagogy and differences in course content between male and female physical education classes may reinforce the body ideals of males and females. If young men and women are taught physical education differently and engage in different activities with the intention to shape their bodies differently, does that continue to reproduce gender differences? Male physical education classes focus on athletic ability in playing a sport or building muscle mass in the weight room, allowing boys to perform dominant acts of masculinity through sport and play (Kirk, 2001; Wright, 1996). Female physical education classes on the other hand focus on cooperative games and “toning” their muscles in the weight room to prevent any “bulkiness” of extra muscle, which allows girls to be active yet still remain feminine (Wright, 1996). Young men and women within physical education classes consume these feminine and masculine ideals, which may shape their behaviours, how they feel about their own bodies, and what they should look like (Bramham, 2003; Cockburn & Clarke, 2002; Flitoff & Scraton, 2001; Parker, 1996). These different masculine and feminine ideals could be applied to the differences in interpretations and actualization of physical education policies between boys and girls in this research study. Additionally, while teaching physical education to male students, the teachers may be more authoritative and dominant in their instructions compared to
instructing females (D. Brown & Rich, 2002). This reinforces the concept that males are “tough” and male bodies are supposed to be treated differently than their female counterparts’. The regulation and discipline that is placed on male bodies differs from that placed on females’ bodies (Petherick, 2011). For example, young men may participate in countless drills and are evaluated on their ability to perform a physical task. Young women on the other hand may play cooperative games and are evaluated by their level of physical effort (Petherick, 2011). These differences reinforce masculine ideals that boys’ bodies should be strong and performance driven while girls’ bodies follow feminine ideals of being soft and less focused on the end result.

The body is central to sport and physical activity, and the manners in which the body is monitored and disciplined are evident in the gender differences in participation (Penney & Evans, 2002). The work of Foucault has been used by scholars examining gender and physical education to understand how the notion of power and culture shapes and normalizes bodies (Garrett, 2004a). *Technologies of the self* are modes of regulation that Foucault suggests encourage individuals to engage in practices that produce discourses and structure the social significance of the activities. Foucault (1977) states that technologies of the self permit individuals to effect by their own means, or with the help of others, a certain number of operations on their own bodies and souls, thought, conduct, and way of being, so as to transform themselves in order to attain a certain state of happiness, purity, wisdom, perfection, or immortality. (p.225)

The technologies of the self will vary for young men and women because of the differences in desired bodies. The types of activities they choose to participate in and dietary habits are some of the differences in the technologies of the self which may exist between young men and women.

Dominant gendered cultural ideals of physical engagement continue to constitute the experiences of males and females in physical education and are demonstrated in the gendering of performance expectations. In her examination of Canadian physical education curricula, van Vliet (1965) found little difference in the history of girls’ and boys’ physical education curricula, except she did find that there was “more emphasis on dance in the girls’ program, and depending somewhat on the school, perhaps more emphasis on individual sports by girls” (p.125). Scraton (1986) and J. Harris (1997) in their studies of physical education classes reaffirmed findings from studies which identified distinct differences in content and delivery of the physical education classes. More recently, in her study of Grade 9 students’ experience in health and physical education class, Petherick
(2011) found patterns of normalcy for both genders. The main focus for the males was the functional and performative aspects of fitness testing (e.g., achieving set fitness standards to pass their class) whereas the females were concerned about the evaluative component of finishing (e.g., failure to finish would impact their grade). The participants in the study acknowledged the evaluation expectations were different for young men and women. The young men were required to run a set distance in a specific time whereas the young women were rewarded for just engaging in the activity. Other examples of the difference in expectations exist between young men and women in Ontario secondary school athletics. For example, the distance for young women in cross country is 2 kilometers less than for young men, the shotput is lighter, and hurdles are shorter for young women. In young women’s hockey, games are shorter and contact is prohibited (H.S.S.A.A., 2012). Why do these performance differences exist? There are currently no reasons or explanations given in the policy which explain why the differences between boys and girls exist, and limited current research questions the policies differences in Ontario collegiate sports. This research study seeks to examine this issue further.

The differences in performance expectations within the physical education classes or sport competition reproduce the notion of competence that marks female bodies as soft and participatory whereas male bodies discursively construct normative masculinity as concrete and linear (Wright, 1996). Physical competence has been shown to have an important effect on an individual’s engagement with his or her body (I. Young, 2005). I. Young (2005) suggests young women who lack confidence about their physical competence will take a tentative approach to physical activity and question their ability. “Women often approach a physical engagement with timidity, hesitancy, and uncertainty” (I. Young, 2005, p. 34). The varying gender expectations normatively construct gendered understandings of physical activity. Petherick (2011) found that the students did not question the gendered understanding of the established running expectations, nor did the students question the gendered approach to participation. Differences in activity expectations continue to differentiate the maleness and femaleness of physical activity and health practices. This information was used to inform the line of questioning for this research study because the research examines whether or not young men and women acknowledge differences in physical education expectations. In addition, this research
informed the questions asked of the key informants in the design and implementation of health and physical education policy.

**The Corporeality of Health and Physical Education**

Physical education classes encourage the movement and experience of corporeality in a manner that is not done or a requirement of other subjects. The differences in requirements can position physical education as a threatening space for the individuals within them. Our cultural obsession with bodies requires us to embark on a journey of sculpting, shaping, moulding our bodies through exercise and eating behaviours so that our bodies remain free of disease while positioning our bodies as vulnerable (Bordo, 1993). Physical education is a physically, emotionally, and socially vulnerable subject which leaves a student open to the possibility of intimidation, humiliation, and embarrassment (Tinning, 1997). Positive experiences of empowerment and competence by some students are countered by experiences of ridicule or shame felt by others, which encourages individuals to monitor and regulate their bodies (Penney, 2002). This research study holds value in understanding the physical education experiences of young men and women. The research examined whether the experiences of all students are positive or negative and whether or not there is variation between the experience of young men and women.

The disciplinary manner of physical education can affect how children view and treat their bodies (Shilling, 1993b). In addition to affecting children’s treatment of their bodies, physical education curriculum follows and rewards health practices which follow the dominant social practices. Students learn to care for their bodies in a manner which crosses social classes, and their ability to follow the instructions establishes their bodies as a marker (Azzarito & Solomon, 2005; Shilling, 1993b). Shilling (2017) argues “that the social construction of bodies needs to be located within particular social locations, within the habitus, and through the development of taste” (p. 129). Physical education teachers draw on dominant discourses and their own experiences, which they pass onto their own students (van Amsterdam et al., 2012). These discourses are influenced by location and social class and may not be reflective of the student population.

With policies and curriculum that are designed to direct lifestyle choices of the students who consume them, students’ bodies are marked not only by lifestyle choices and physical abilities but also by the embodiment of corporeal practices (Azzarito, 2009; Leahy, 2009).
Bourdieu’s (1984, 1985) work on habitus, taste, and social location can be related to school practices because of the social location of the students’ bodies which may be inscribed on their bodies as a result of physical ability, body shape, and/or body size. The students’ bodies can be considered an unfinished entity which is shaped through the experiences in the school environment and whose results are marked by the physical appearance. Appropriating this to a Foucaudian perspective, the students’ bodies are gendered through their social and cultural capital. Adolescence is targeted as an appropriate time period for developing and instilling lifestyle choices and changes (Feldman & Elliot, 1997). The adolescent body is “typically portrayed in a range of texts, from educational theory to popular media, as unruly, uncontained, uncontrolled, and therefore needful of careful monitoring, regulation and instruction” (Lupton & Tulloch, 1998, p. 22). This gives rise to justification for school policies and procedures that monitor, regulate, and normalize the adolescent body. “Students are taught technologies of the self that work towards shaping and disciplining the body in certain ways, normalizing it according to assumptions about the ideal body” (Lupton & Tulloch, 1998, p. 22). To perform the normalized body, an individual must manoeuvre through power/knowledge relationships to shape his or her body, learn particular skills, engage in specific behaviours, and develop a certain desire to identify and define oneself (J. Evans & Davies 2002; Wright, 1996). Embracing the normalized lifestyle constructs the understanding the individual uses to enact and envision the world (Wright, 1996).

The consumption of bodily practices is a form of social reproduction and demonstration of physical capital within a school environment (Shilling, 2017). Physical education discourses are corporeal instructions which outline behaviours and direct individuals in particular ways they should monitor and regulate their bodies (Burrows & Wright, 2007; Rich & Evans, 2009a; Rich, Evans, & De Pian, 2011). Bodies that follow normative, dominant discourses express a spatial location and symbolic value which can be culturally rewarding (Bourdieu, 1986). Social habitus can also be used to further question self-surveillance and responsibility. Bodies that uptake self-surveillance and discipline demonstrating the dominant and normative discourses of muscular or lean bodies are rewarded through praise and reinforced in media imagery. L. Hills (2006) suggests understanding physicality requires conceptualization of agency as a complex, unfinished entity. It requires a negotiation between gendered power relations and individual responses that can be balanced with the recognition of potential change. Drawing on Bourdieu’s
concept of “the habitus,” Shilling (1991) claims that each body, and every gesture or physical act demonstrates an individual’s social location and orientation to the world. One’s physical capital can play an important role in the production of social inequalities, and physical education can contribute to the process (Shilling, 1991). Physical capital can be turned into social or economic gain, and social class can limit the range of opportunities which can be converted to physical capital (Shilling, 1991). Shilling claims “children from (the dominant) classes tend to engage in socially elite sporting activities, which stress manners and deportment and hence facilitate the future acquisition of social and cultural capital” (p. 656). Therefore, students in a higher social class may be able to attend sports camps in the summer, which would give them more physical capital as a result of the increased skills gained from the camp and the social networking.

Within Western culture, the body has become a representation of the self, and the body has become a normalized entity with few exceptions (Theberge, 1991). The requirement of individuals to regulate their bodies can be linked to a capitalist marketplace’s need for consumerism. To achieve social approval, an individual monitors and regulates his or her body to align with the narrow image of masculinity or femininity which is desired by society. Various physical practices can be employed to sculpt and shape the body to reproduce and visually represent the socially desirable gendered bodies (Theberge, 1991). Working on one’s body is a continuous investment, which is rendered necessary to acquire and maintain health. The school system is a key institution responsible for understanding this socially established understanding of the body.

Practices of body management, maintenance, and control influence the social construction of the body (Pronger, 2002). Physical education policy produces and programs dominant views of the body through development of character and skill and the obligation of health discourses as they establish an individual’s identity (J. Evans & Davies, 2002). Within a physical education class, appropriate social practices are learned and the inscription of health discourses occurs, which allows for individuals to be categorized and a hierarchy to be established by the performance of normative health behaviours and expectations (Bordo, 1993; Shilling, 1993a). The school environment is a controlled environment, which ensures that students learn the normalized behaviours and techniques for monitoring and regulating their bodies (J. Evans et al., 2008). In the schooling process, power works to prevent individuals from making individual decisions; rather the decisions made are autonomous (Lupton, 1995). Physical education policies
can contribute to the “construction and constitution of the body in modernity” (Kirk, 1994, p. 165). The modern body is subjected to rational, productive, and technical practices aimed at regulating, controlling, and disciplining the body (Kirk, 1994; Lupton, 1995; Pronger, 1998). Physical education policies may be used to shape and mould students’ bodies. This research study examines the influence of the existing health and physical education policies on students’ behaviours towards normalizing their bodies and whether these behaviours are gender specific.

**Opting “In” or “Out” of Health and Physical Education Classes**

Health and physical education is mandatory for all students in Ontario from Grade 1 to Grade 9. Enrolment in health and physical education classes decreases for both young men and women after the course is no longer mandatory. In a 1998 survey, Allison and Adlaf (2000) found a 32% decrease in enrollment from Grade 9 to Grade 10. A more recent 2006 study found enrolment decreased 48.3% between Grade 9 and Grade 10 (Dwyer, Allison, LeMoine, et al., 2006). A number of reasons have been suggested for this decline in enrolment. Health and physical education may not be considered by some students as a course which will help with their future academic pursuits (Dwyer, Allison, Goldenberg, et al., 2006; Flintoff & Scraton, 2001). With limited course selections during secondary school, students may choose to take a more “academic” course which may help with their postsecondary pursuits. Other reasons for demission may be that student may demit from health and physical education classes because they find it boring or repetitive (Gibbons, Wharf Higgins, Gaul, & Van Gyn, 1999), do not consider it applicable or meaningful to their lives (Gibbons, 2009), or because of a lack of interest in the course (Dwyer, Allison, Goldenberg, et al., 2006). The reasons a student may choose to demit from a health and physical education program may produce and an extensive list which may not consider any sociocultural contexts or sex/gender issues which mediate a student’s decision to opt in or out.

The reasons student may demit from health and physical education may also result from the physical requirements of the course. The execution of a physical education is predominantly structured as a corporeal performance in sports (J. Hills, 2015). High status is attributed to individuals whose appearance or performance excludes strength (Bramham, 2003; Hauge & Haavind, 2011; Tischler & McCaughtry, 2011), muscularity (Gorely, Holroyd, & Kirk, 2003), or ability (Hay & Macdonald, 2010; Redelius, Fagrell, & Larsson, 2009; Wright & Burrows, 2006). This creates and reproduces a hierarchical classroom structure in which those who exude the
desired attributes achieve status and create a division within the class (McCaughtry & Tischler, 2010). As a result, research has suggested students may not enroll in health and physical education because of perceived favouritism to athletes (Dwyer, Allison, Goldenberg, et al., 2006), rejection or exclusion (Beltrán-Carrillo, Devis-Devis, Peiró-Velert, & Brown, 2010), self-perceived lack of physical competence (Rønholt, 2002), fitness testing requirements (Corbin, 2002; Hopple & Graham, 1995; Luke & Sinclair, 1991; Rice, 2007), or bullying (Jensen, Cushing, & Elledge, 2014). These compounding variables of the class structure, peer relationships, and teacher interactions may contribute to a decrease in enjoyment, resulting in demission from the subject (Beltrán-Carrillo et al., 2010; Cairney et al., 2012; Strean, 2009).

The reasons young men or young women opt in or out of health and physical education class may differ. Historically, young women have lower levels of physical activity and are less likely to engage in health and physical education than young men, especially during adolescence (Barr-Anderson et al., 2008; Cockburn & Clarke, 2002; Flintoff & Scraton, 2001; Garrett, 2004b). Young women may feel pressured to adopt stereotypical and heteronormative constructions of femininity such as thinness, passivity, and emphasis on one’s appearance (Azzarito & Solomon, 2005; Penney & Evans, 2002; Wright, 1999). As a result, young women may be encouraged by their parents, teachers, coaches, et cetera, to engage in activities which are aesthetically pleasing and focus on personal appearance rather than activities which focus on physicality (Flintoff & Scraton, 2005). Young men and women are often segregated for health and physical education, which may contribute to underlying messages about the abilities of young men and women and contribute to a hidden curriculum within schools (Fernandez-Balboa, 1993; Fusco, 2006; Thorne, 1999). Consequently, young women have lower levels of perceived physical competency, which may result in their disengaging from physical activity or striving to achieve physical competency (Cairney et al., 2012; Gibbons, Susut, & Fenton, 1999). Disengagement from physical activity allows young women to maintain normative representations of femininity (Dwyer, Allison, Goldenberg, et al., 2006).

For young men, sport and health and physical education classes may reproduce hegemonic masculinities and create structures, environments, or inequalities which privilege young men who exude heteronormative bodies and physical competences and marginalize those who do not (Connell, 2008; Gard & Meyenn, 2000; Millington, Vertinsky, Boyle, & Wilson, 2008; Pringle, 2008). The use of sports as a primary focus within the teachings of health and physical education
allows for the reproduction and preservation of gender identities (Connell, 1995; Paechter, 2003). Through sport, young men are taught “real men don’t cry, don’t apologise...real men display power, aggression and strength” (Light & Kentel, 2010, p. 133). Those who embrace and display these dominant masculinities are applauded by peers and teachers. This prevents other bodies and physical abilities from being recognized, encouraged, or celebrated (Gard & Meyenn, 2000; Hickey, 2008). Accordingly, young men who do not feel their physical abilities or form of masculinity have a place within sport or physical activity may choose to opt out (Strean, 2009).

Physical Education Policies: Monitoring and Regulating of Children’s Bodies

When contemporary schooling was first established in Western countries in the late 19th century, it had two key institutional imperatives. The first imperative was “the social regulation of the cadre of children by working on the bodies of children” (Kirk, 2004, p. 201). Rules and procedures developed by schools were invented to regulate children’s bodies in time and space. The second imperative was “to produce productive bodies, children who would become healthy, robust adults, able to contribute to national and domestic economies” (Kirk, 2004, p. 201). The expectations for young men and women were gendered at this time, as men would be the family breadwinners while women were the child bearers and child rearers (Kirk, 2004). Although the practices of regulating bodies may be less severe in the current education system, these practices still exist.

The characterization of obesity as a “global epidemic” or an “obesity pandemic” and crisis about children’s bodies has established a prime political climate to implement government interventions and policies to “protect” adolescents and children from the growing epidemic (Gard, 2009; Tinning, 2002). The use of the term epidemic frames obesity as a contagious or preventable illness and suggests that less tolerance of others and more public vigilance are needed (Saguy & Riley, 2005). Children and adolescents are considered to be disproportionately affected by the “obesity epidemic” and always “at risk” of becoming overweight or obese because these groups are not considered mature enough to monitor and regulate their own bodies (Flores et al., 2007). By characterizing children as always being potentially “at risk” and requiring protection, it legitimizes government action to collect information about the bodies of children and adolescents and justifies the implementation of polices and programs as a result of the information collected (Rich & Evans, 2009b). Although there is uncertainty about the claims surrounding the obesity crisis, this uncertainty is not acknowledged by “experts” in the field.
Information surrounding the obesity crisis is often presented as expert commentary and distributed in professional literature to physical educators, where the message of certainty about the epidemic is heard and noted above the uncertainty (Kirk, 2006a). In an attempt to achieve a greater sense of credibility and an effort to legitimatize the field within the broader educational field, many educators have embraced the research surrounding children’s bodies without questioning the research or physical educators’ past role of maintaining the body shape of the population (Gard, 2009).

Schools are seen as an ideal site for developing and implementing large-scale interventions aimed at regulating levels of physical activity and diets of children and adolescents by media and politicians because no other public institution has as much continuous and intensive contact with children or adolescents (M. Carter & Swinburn, 2004). Schools have become institutional sites which are crucial to managing and regulating the body (Gard & Kirk, 2007). The government ideas of health are spread through school curriculum and policy. In Western countries, neoliberal discourses of health locate responsibility for health with the individual (Lupton, 1995). Children and adolescents may not be considered mature enough to monitor their own health and therefore need various mechanism of surveillance to monitor their personal choices as well as their bodies within the school environment (Rich, 2011). As a result, Western governments regulate the nutrition choices and physical activity requirements for students within the school day by implementing various educational policies.

Media and government reports suggest that children are not achieving the government-prescribed daily levels of physical education (Active Healthy Kids, 2012a; Picard, 2010). Despite teacher concerns about insufficient daily instructional time, a number of Western countries have created policies to mandate a specific level of school-based daily physical activity for children to assist children in achieving the government prescribed daily levels of physical activity (Livingston, 2005; P. Morse, 2005). Although variation does exist for the policies, typically, in Canada, these policies require schools to provide 20–30 minutes of daily physical activity for elementary school children, and weekly requirements are given for secondary school children (British Columbia Ministry of Education, 2011; Ontario Ministry of Education, 2009). The monitoring and accountability of these programs is usually left in the hands of teachers and school administrators (Ontario Ministry of Education, 2006). Limited training and resources are provided to teachers and school administrators to execute the programs and, as a result, these
programs often fail to meet the outlined program requirements (Bridson, 2011; Stone, Faulkner, Zegien-Hunt, & Bonne, 2012). These programs run on the premise that “exercise = fitness = health” and children will achieve healthy bodies through these programs (Gard & Wright, 2001). However, the link between children’s physical activity levels and their health has yet to be firmly established (Johns, 2005). In addition, physical education policy may dissuade children from being physically active because of the structure of the physical education classes and manner in which they are taught (Tinning & Fitzclarence, 1992).

Physical education classes may be primarily sport-based lessons, which may persuade students from enrolling in physical education classes if they are not successful at the sports or do not enjoy the competitive aspects (Ennis, 1996; Ntoumanis, 2001; Portman, 1995; Solomon, 1996). Although curriculum models may differ in their competitive structure, inherently competitive activities can be defined as achieving success (winning) or not having success (losing; E. Bernstein, Phillips, & Silverman, 2011). Competitive activities can be zero sum, negative sum, or contingency activities. Zero sum activities are defined by one person winning and another losing. Negative sum activities imply that there are many losers and a few winners, while contingency activities depend on the success of a skill (L. Brown & Grineski, 1992; Kohn, 1999). For these activities, continuation of play by students is dependent on their success or their skill level. Therefore, in many of the competitive activities in physical education classes, having skill can facilitate participation in the activities while not having skill can hinder it (E. Bernstein et al., 2011). Students have different skill levels, which can contribute to different experiences in physical education (Silverman, 2005). If students do not have the skills to actively participate in a game, this may negatively impact their physical education, experience which may cause them to not want to participate (Carlson, 1996). Alternative physical education classes that have combined leisure activities and less competitive activities along with sport education have found success in student participation and enjoyment (E. Bernstein et al., 2011; Mohr, Townsend, & Pritchard, 2006). Students’ voices and observations of their participation in physical education experiences can provide invaluable information about the success of a physical education class (Cothran, Kulinna, & Garrahy, 2003). If the goal of physical education is to promote a lifetime of physical activity (S. Fairclough, Stratton, & Baldwin, 2002), it is important to gain information surrounding students’ experiences in physical education classes. This study will seek to understand whether the current physical education classes are helping or hindering students’
physical education experience by providing students the opportunity to express their voice combined with observations in the environment. Does the current structure of physical education classes and policies create a positive experience which engages students and encourages their lifetime participation?

Physical education policies have also been used to monitor students’ bodies or inspect and regulate their health choices. The shape and size of children’s bodies are currently being monitored in Western countries such as the United States, Australia, and the United Kingdom (Rich, 2011). In the United States, some states are sending health report cards along with academic grades home with their students. Delaware, South Carolina, and Tennessee are just some states which use the body mass index (BMI) as the health measure for their health report cards (Kantor, 2007). The validity of the BMI as a health measure is questionable, especially for children (Gard & Wright, 2005). For adults, BMI may account for between 60 and 75% of the variation in body fat content and does not account for BMI differences between ethnic groups or the variation in human physique (size and amount of bone, muscle, and fat; Ross, 2005). For children, BMI does not account for any natural and age-related changes in body composition and distorts readings for women who tend to have more adipose tissue and are shorter than men (Bray, 2003; P. Burstyn, 1990; Keys, 1980; Rush, Plank, Laulu, & Robinson, 1997; Swinburn, Ley, Carmichael, & Plank, 1999). Bill Ross suggests that “the BMI is almost useless as an index of fatness” (Australian Association for Exercise and Sports Science, 1999, p. 3). Drawing on a study of 12,282 men and 6,593 women, Ross found only a moderate correlation between BMI and the sum of five skin fold measurements (a more direct measurement of fatness), but he found a similar correlation with the girths of muscular parts. Ross concluded, “In other words, in the combined sample there were roughly similar relationships between the muscle, bone and fat estimates with the BMI. BMI might just as well be used as a predictor of muscularity or bone mass!” (Australian Association for Exercise and Sports Science, 1999, p. 3). Despite concerns over the validity of these measures, the health report cards and BMI have been used to take children away from their parents and placed in foster homes in the United Kingdom and United States (Hull, 2011; Jaslow, 2011).

The schools are also monitoring students’ food choices. Children in the United Kingdom must scan their fingers before purchasing food at the cafeteria. These results are sent home to parents who can monitor and track their eating habits (McMahon, 2011). Some school districts in
the United States have students wear heart rate monitors so the school can collect information on
the amount of physical activity a student engages in (Rich, 2011). The monitoring of students’
physical activity levels is not confined to the school walls or school day; some school districts
have students wear the heart rate monitors at home so school officials can monitor students’
activity levels for 24-hour periods (Linge, 2012). The information obtained through these
monitoring efforts is used to justify the surveillance (Rich, 2011). These policies call into
question the lengths to which the government and schools will go before the general public will
be concerned about the extent of these policies. Within Ontario, questions have to be raised
about whether or not the current education policies have gone too far concerning the monitoring
and regulating of students’ bodies and behaviours. Who or what determines when the
government has gone too far concerning the monitoring and regulation of students’ bodies?

Physical education policies may also take the shape of inspections and regulation
surveillance (Rich, 2011). In Australia, chocolate cake once used to celebrate birthdays is now
banned, and small vanilla cupcakes are recommended as the replacement (Edwards, 2006).
Furthermore, teachers are being encouraged to go through children’s lunch boxes to remove
“unhealthy” items such as potato chips or sweets (L. Clark, 2010). The justification for these
restrictive food policies is to change the school food environment and promotion of healthier
food options (Wechsler, Devereaux, Davis, & Collins, 2000). However, these policies fail to
ignore the food preferences of children, cultural influences on food, and environmental factors
such as proximity of fast food restaurants to schools which result in little impact on students’
nutrition choices (Austin et al., 2005; Ligaya, 2012).

The monitoring and regulating of bodies has become commonplace in schools. Students
frequently encounter various corporeal practices intended to monitor and regulate their bodies.
The information collected during the monitoring process can be used to support the continuation
of or changes to the current practices. A recent focus for policy implementation has been school-
based nutrition. Within Canada, most provinces have implemented a policy which limits the food
sold in schools (CSPI, 2007). Although these policies may control the food that is sold in the
school environment, they may not assist students in making healthy food choices when students
consume food outside of it.
School-Based Nutrition Policies

The importance of food and nutrition within schools is often overlooked by educational researchers (Weaver-Hightower, 2011). Although food and nutrition have been heavily addressed in public health research, food is “nowhere on the list of priorities for most funders of specifically educational research, so researchers have heretofore had little incentive to focus on food” (Weaver-Hightower, 2011, p. 16). However, “nearly every culture with formal schooling feeds its children at school, pauses while they eat food brought with them, or allows them to leave school to eat” (Weaver-Hightower, 2011, p. 15). Furthermore, the health implications of the food environment can confound a study’s results, which increases its importance in education research (Weaver-Hightower, 2011). It is difficult to disentangle the implications of food in health education because of the compelling correlations between the food and physical activity (Muenning, 2007). Eating behaviours and physical activity levels are often intertwined when discussing children, and adolescents’ bodies but school policies which target nutrition and physical activity are implemented separately and often do not acknowledge the relationship between the two (Bauer, Yang, & Austin, 2004). This may be because it is difficult to disentangle their interaction and examine physical activity and eating behaviours in isolation. Also, it may be thought that implementing a policy to target physical activity and a separate policy to target eating behaviours may be just as effective and mutually beneficial, thereby eliminating the difficulty in understanding the effectiveness of a policy that would target both behaviours.

Nutrition authorities argue that schools can play a vital role in establishing eating behaviours and reversing the trend of childhood obesity because of the amount of time students spend at school and the ability to educate students on healthy eating habits (Briggs, Safaii, & Beall, 2003). During the school year, children and adolescents consume a large portion of their daily energy needs presumably in the school environment during the school day (French, Story, Fulkerson, & Hannan, 2004). Researchers and large health organizations such as the Centres for Disease Control and the World Health Organization believe that the food choices and behaviours established during the early schools years can impact an individual’s vulnerability to chronic diseases such as diabetes, heart disease, or osteoporosis, later in life (Centers for Disease Control and Prevention, 1997; Lytle & Kubik, 2003). Relatively little research has examined factors which influence adolescent eating behaviours, especially in a Canadian context (Shannon, Story,
Additionally, there is virtually no research examining what types of foods are being served by cafeteria staff or what kinds of food and what volume is being consumed by students within the school (Center for Science in the Public Interest, 2007). The focus of school eating behaviour research has primarily focused on examining students’ eating behaviours using an obesity lens. This can be problematic because it may influence the types of data collected and the conclusions formed. The data collected about the students’ health may be compared to their risk of being overweight or obese rather than a general indication of overall health.

As institutions that occupy a sizable portion of government budgets in developed countries, schools have experienced cutbacks associated with neoliberal economic policies (Winson, 2008). The province of Ontario does not provide funding to schools to operate any nutrition programs. School food service programs that were once funded by government agencies are now required to seek out their own funding to sustain their programs (Winson, 2008). School cafeterias are privately operated and want to turn a profit, and as a result, may need to switch to low nutrition products as a way to relieve fiscal constraint (Hobson, 2015; Story, Kaphingst, & French, 2006). Schools have also turned to multinational beverage and snack food manufacturers who are willing to provide money to schools in exchange for an opportunity to “cash in” on the increasingly lucrative youth market which many companies consider pivotal to their profitability (Brody, 2002). Corporations are given exclusive “pouring rights” contracts by school boards for the exclusive sale of their products in school vending machines and cafeterias (Nestle, 2000, 2002). In exchange for these exclusive contracts, schools are rewarded with cash or other incentives. Some companies offer further financial incentives in exchange for advertising on scoreboards, sportswear, school buildings, and literature. Some contracts go even further and directly link the school’s financial incentives with the quantity of soda sold (Nestle, 2000).

These types of contracts provide corporations with a solid school sales base as well as encourage brand loyalty from the increased conscious and unconscious exposure to their brand (Hays, 1998). In 1998, New York State signed a 10-year agreement with Coca-Cola for 1.53 million dollars (Nolan, 1998). A Colorado district signed a similar agreement with Coca-Cola for 53 of their schools for a total of $8 million (Hays, 1998). In Canada, school boards rarely disclose the financial details of these contracts with soft drink corporations because of confidentiality clauses inserted in the contracts by the beverage companies. In 2003, a high
school student in Ontario challenged the confidentially clause in a contract under the Freedom of Information Act. The courts ordered the contract information to be released to the general public. The release order had the effect of raising the consciousness of both parents and the general public, which questioned the impact of these policies. Not all schools within a board are bound to these agreements, and some schools have opted out of such agreements with soft drink corporations because they object to the conditions of the contracts (Kalinoski, 2003). In recent years, the ethical and moral concerns surrounding these policies have persuaded some school boards to eliminate these policies within the entire school board (Henry & Garcia, 2004).

Despite the change in different provincial nutrition policies which limit the types of food and beverages that can be sold in schools, contracts which surround the food and beverages sold in Canadian schools still exist. Approximately one third of all cafeterias are run by private companies such as Aramark or Chartwells who have exclusive contracts with school boards (Barton, 2012). Despite these companies being part of the conversations during the design and implementation of school nutrition policies, many school cafeterias are struggling to remain open because of sluggish sales that followed the removal of junk food (Barton, 2012). In Ontario, cafeteria sales are down 20% to 30% in the York District School Board, and the Toronto District School Board is expected to lose over $700,000 this year (Rushowy, 2012). If this trend continues, it may result in the closure of school cafeterias within the province (Rushowy, 2012). The impact of this is unknown but may limit the effectiveness of any education policy targeting nutrition because the only food sources for students would be what food was brought from home or available at external establishments.

In Canada, the response by the provincial governments to put in place concrete nutrition legislation has started to occur only in the past 10 years (Winson, 2008). Most Canadian provinces have passed legislation creating policies which limit the types of food products that can be sold in schools. Unlike public health interventions which target changing individual behaviour, these policies attempt to change the school environment, which is hypothesized to improve opportunities for healthier food choices for the entire student population (Masse et al., 2007; Wechsler et al., 2000). However, clear weaknesses in these policies include nonenforceable guidelines, no monitoring of the policies, lack of public information concerning school compliance, and failure to acknowledge environment adjacent to the school (CSPI, 2007; Winson, 2008).
Winson (2008), while examining food consumption in the school environment, was alerted to the fact that many students left the school environment to purchase food at one of several fast food outlets located near the school. This discovery is reinforced by a study examining proximity of fast food outlets to schools in the Chicago area. Austin et al. (2005) found that “nearly 80% of schools in Chicago had at least 1 fast food restaurant within 800m” (p. 1578). School cafeterias compete with outside vendors for the attention and business of the students. This may have implications on the pricing and types of food which are sold within schools. Research has shown that adolescents are sensitive to the pricing of food and beverages (Shannon et al. 2002). Several studies have found when the cost of healthy food is lower than unhealthy foods, an increase in the consumption of the healthy food has ensued (French et al., 1997, 2001; Hannan, French, Story & Fulkerson, 2002). If the price of healthy food in Canadian schools is not subsidized and remains costly, students may find alternative options. This issue will be explored in more detail in my research.

In Ontario, the removal of lower cost unhealthy foods without the exchange with lower cost healthy foods may encourage students to leave the school environment to seek other, more affordable options. This idea is supported by some researchers who suggest if students are deprived of foods that are “excluded by nutrition standards,” they may compensate by eating them outside of school (Heatherton, Polivy, & Herman, 1990). Other researchers go further by suggesting that students may actually consume more of the “excluded foods” because of the psychological urge caused by having these foods “forbidden” (Fisher & Birch, 1999; L. Francis & Birch, 2001). Research examining different school policies which limit students’ access to outside schools such as through shorter lunch periods (Probart, McDonnell, Hartman, Weirich, & Bailey-Davis, 2006) or having a closed campus (Neumark-Sztainer, French, Hannan, Story, & Fulkerson, 2005), both in an attempt to prevent students from leaving school, have shown success in limiting students’ purchases of food at external businesses. Are there gendered behaviours which may impact the eating behaviours of boys and girls inside or outside the school environment? In my research I will explore this issue in an attempt to provide an understanding of the students’ behaviours in reaction to the restriction and elimination of foods in the school environment and whether cost is an inhibitor.
The Establishment of Biological Sex

From an evolutionary perspective, biological sex refers to different contributions males and females have to the reproduction of offspring (Einstein, 2012). Using this understanding from a strictly research perspective, biological sex refers to the hormones, genes, and physiologies which contribute to the act of reproduction. However, when placed in broader contexts outside of the laboratory, the understanding of biological sex differences has larger implications.

In modern Western society, sex refers to the biological and morphological differences between men and women, while gender refers to any cultural or social differences between males and females (Hird, 2004). In premodern society, there was not a clear establishment of between sex and gender. Before the 17th century it “was still a sociological and not an ontological category” (Schiebinger, 1991, p. 8). During the pre-Enlightenment period, the term sex was used in a similar context as modern society uses gender. The interchanging of terms as a “foundational ontology was achieved through a slow epistemic shift – not in the body itself, but in meanings attributed to this body” (Hird, 2004, p. 18) through emerging discoveries in biology.

Prior to the 18th century, men and women were considered to have one morphological body and “femininity and masculinity were determined more by close attention to the signs of movement, temperament, voice and so on which indicated on which side of the one axis or “sex” any individual gravitated” (Hird, 2004, p. 18). During this time, one’s genitals did not define sexual difference; rather sexual temperament was used as a marker of one’s individual sex. The one axis model of sex, which was shared by men and women, afforded fluidity of movements across a range of gender behaviours and freedom to express variations in characteristics (Hird, 2004). The current modern model of two distinct sexes does not provide these opportunities.

The 19th century started the formation of sex as a fixed and essential entity. Work within the realm of biology focused on the physical body as the fundamental signifier of sex and sexual difference (Hird, 2004). Challenges to traditional epistemology combined with shifts in political and social frameworks allowed for changes to the manner in which bodies were examined. Dissections, which were once considered sacrilegious, challenged the traditional views of the body (Schiebinger, 1993). Dissections allowed for scientists to find the “truths” of the body below the surface, which allowed for more critique about the sex differences that were previously based on superficial observations (Schiebinger, 1993). For example, the ovaries and testes were once considered the same organ but were reclassified as two distinct organs with
different purposes. Anatomists presented “the male and female body as each having distinct telos – physical and intellectual strength for the man, motherhood for the woman” (Schiebinger, 1991, pp. 190-191).

A one-axis model for men and women in which all individuals were equal transformed into a two-sex paradigm which focused on the “natural” differences between men and women and sought to justify the authority of men over women. The result was two completely separate and different scales for men and women. This idea supported the biological foundation of sex complementarity which considered men and women to be “biologically better suited to different roles, and that these roles complemented each other to form the optimum living, working system” (Hird, 2004, p. 23). “Nature” was the reason for social inequality for women and not a result of human or political actions. Hormones, chromosomes, and genitalia are “constituted as embodying the essence of sex” (Harding, 1996, p. 99) and therefore immutable, while gender is a result of culture and therefore changeable (Hood-Williams, 1996). This shift in understanding about sex differences between men and women started a movement to discover the natural physical differences.

**Skeletons**

Before the 18th century, anatomists would use the same skeleton to represent men and women. Sex differences were considered superficial and therefore did not extend to tissues below the surface such as bone (Schiebinger, 1993). By the 18th century the notion of sex complementarity was present within anatomical representations of the human skeleton. Comparative analysis of female and male skeletons discovered differences in the spine, skull, sternum, clavicle, coccyx, and pelvis, which was used as evidence that “the destiny of woman is to have children and to nourish them” (Schiebinger, 1993, p. 222). The physical difference in skeletons was used to justify views about differences in mental and physical constitution. This also supported the idea that men and women have different purposes in life and engage in different behaviours:

1) a weak constitution makes the bones of women smaller in proportion to their length than those of men; 2) a sedentary life makes their clavicles less crooked (their arms are hindered by their clothing and have been less forcibly pulled forward); 3) and a frame proper for their procreative functions makes women’s pelvic area larger and stronger to lodge and nourish their tender fetus. (Schiebinger, 1993, p. 157)
Although some anatomists drew a woman’s skull as smaller in proportion to her body, Samuel Soemmerring concluded that women’s skulls are heavier in relation to body weights, which led his student, Ackermann, to conclude that women lead a sedentary life and consequently do not develop large bones, muscles, blood vessels and nerves as do men; since brain size increases as muscle size decreases, it is not surprising that women are more adept than men in intellectual pursuits. (Ackermann as cited in Schiebinger, 1991, p. 64).

Instead of larger skulls being attributed to heavier and higher powered brains, women’s brains were associated with incomplete development and associated with children whose skulls are larger in proportion to their bodies (Schiebinger, 1991). When creating drawings of men and women, anatomists would use several bodies to create the “typical” male and female skeletons which met the cultural understandings. This resulted in drawings that might be comprised of one woman’s wide pelvis which is suitable for child bearing, combined with another woman whose skull represented their lower level of intelligence, et cetera (Hird, 2004). “Anatomists in the 18th century ‘mended’ nature to fit emerging ideals of masculinity and femininity” (Schiebinger, 1991, p. 203). Petersen (1998), in his analysis of female and male skeleton depictions in Gray’s Anatomy, found the drawings to emphasize relatively miniscule sex differences while minimizing apparent similarities. This is problematic because that information can be used to justify or reinforce common cultural practices and behaviours considering males and females.

The emphasis on skeletal differences combined with the importance placed on the skeleton as a deep and penetrating aspect of the body as well as the center of the body led to conclusions that differences between men and women must exist in all other aspects of the body such as organs, muscles, and veins (Schiebinger, 1986).

**Hormones**

Hormones were originally thought to be separate and distinct for men and women. This dichotomy supported the idea that men and women were ethically designed for different roles and therefore was not quickly challenged by science. Eventually it was determined that sex hormones were not exclusive to one sex and could be converted onto one another because of their similarity in chemical structure (Hird, 2004). The proportion of each sex hormone varies across individuals and throughout life stages. For example, on average, post menopausal women
have lower levels of progesterone and estrogen than men of similar age (Oudshoorn, 1994). Hormones are no longer thought of as distinct entities of which are contained within the body but rather substances that interact between the body and the environment (C. Roberts, 2003).

**Gametes and Genetic Material**

The behaviour of gametes and an individual’s composition of genetic material deoxyribonucleic acid (DNA) are also used as evidence towards clear sex differences between men and women. In scientific literature, feminine and masculine behaviours are associated with the role and purpose of each gamete. Sperm is described as active, strong, and powerful for their role in the journey to and penetrating the egg, whereas the egg is portrayed as passive and fragile for its supposed limited mobility and inability to survive on its own once released from the ovary (E. Martin, 1991). However, literature downplays facts such as sperm’s inability to survive outside the body after several hours of release or the movement of the egg towards the cervix unassisted. Moreover, research suggests that the thrust of sperm is actually particularly weak and the sperm make strong attempts to escape the egg unless the digestive enzymes of the sperm assist in its plight to enter the egg’s cell wall rather than mechanical force (E. Martin, 1991). These descriptions in the literature assist in “implanting of social imagery on representations of nature… lay[s] a firm basis for re-importing exactly that same imagery as a natural explanation of social phenomena” (E. Martin, 1991, p. 500). While all data is open to human interpretation, the ways in which data is presented to the reader can not only change the interpretation of the data but also its importance. Martin’s approach of viewing scientific data through the lens of culture allows her to expose stereotypes that exist in scientific literature and contribute to misunderstandings about what constitutes male and female.

DNA is considered the basis of life and, a gene is a specific sequence of DNA which codes for different structures and functions in the human body. Individuals inherit DNA from their parents; however DNA is not inherited equally. Since the egg serves as the cytoplasm of the original zygote, an individual inherits mitochondrial DNA from his or her mother, and therefore the majority of DNA an individual inherits is female (Hird, 2004). Humans have 46 chromosomes, 44 of which do not relate to sexual difference. A focus on sex differences often ignores the role of the other chromosomes as well as sex variations which may occur in the sex chromosomes such as XXY or XXYY. Chromosomes alone may not be the sole determination of sex. In some reptile and amphibian species, the temperature of egg incubation determines the
offspring’s sex, while some fish are considered intersex (Fausto-Sterling, 2012; Snowdon, 1997). This may suggest sex is a more flexible concept and the role of social and environmental factors in influencing an individual’s sex should be considered (Snowdon, 1997).

It must be possible to concede and affirm an array of “materialities” that pertain to the body, that which is signified by the domains of biology, anatomy, physiology, hormonal and chemical composition, illness, weight, metabolism, life and death. None of this can be denied. (Butler, 1993, p. 66)

However, in the traditional nature versus nurture debate, it may be difficult to separate the contextual meaning of an individual’s biology.

**Social Influences On Gender**

With the increase in the number of parents choosing to know the sex of their baby before he or she is born, the establishment of gender may occur even before a child is born (M. Harris, 2013). With the knowledge of their baby’s sex, parents may change their purchasing decision to buy gendered items and create a gendered environment for their child upon birth (M. Barnes, 2013). This gendered environment may be filled with pink items and dolls for girls and blue items and trucks for boys (Fausto-Sterling, 2012). It is argued that color and toy preferences for boys and girls are established naturally and not influenced by socialization.

Few studies examine children under the age of 2, but older children are found to have variation in colour preferences (Fausto-Sterling, 2012). Boys are more likely to prefer the colour blue while rarely favouring pink. Girls, on the other hand, although preferring pink, will frequently pick the colour blue. As with sex-stereotyped behaviours, boys will cling to stereotypes more than girls (Chiu et al., 2006). The choice of blue for boys and pink for girls was not always the established standard. An article in the *Ladies Home Journal* in 1918 suggests the reverse of today’s standard, with pink being “a more decided and stronger color…more suitable for the boy, while blue…is more delicate and dainty…prettier for the girl” (Frassanito & Pettorini, 2008, p. 881). Up until the 1940s, red and pink were associated with strength and courage while blue was associated with constancy and faith (Fausto-Sterling, 2012). The use of the pink triangle by Nazi Germany to represent homosexual men and the use of blue cloth in military uniforms changed the association of pink and blue (Frassanito & Pettorini, 2008; Paoletti, 1997).
When examining toys and the action of play, girls are thought to prefer dolls and tea sets while boys prefer trucks and weapons (Pasterski et al., 2005; Serbin, Poulin-Dubois, Colburne, Sen, & Eichstedt, 2001). Gendered toy preferences have been found in infants and increase with age (G. Alexander, 2006; G. Alexander, Wilcox, & Woods, 2009; A. Campbell, Shirley, Heywood, & Crook, 2000). Social learning theories speculate that children are socialized towards gendered behaviours (which includes playing with toys) by positive reinforcement when engaging in appropriate gendered behaviour (Bandura, 1977; Mischel, 1966). While cognitive theories suggest gender is acquired through three stages: gender labeling, gender stability, and gender constancy, the way in which children learn gender remains the same across difference situations and in turn influences gender behaviours (Kohlberg, 1966; Ruble, Martin, & Berenbaum, 2006). Other cognitive theorists suggest gender schemas are formed to help children develop gender-related information obtained from their interactions with their environment (Bem, 1981; C. Martin & Halverson, 1981; C. Martin, Ruble, & Szkrybalo, 2002). Using a hormonal perspective, it is suggested that early differences in hormonal levels, particularly in prenatal hormone environments, produce differences in neural organization and in turn produce differing amounts of hormones which result in the brain masculinization (Hines, 2004; Meyer-Bahlburg et al., 2004; Nordenstrom, Servin, Bohlin, Larsson, & Wedell, 2002; Pasterski et al., 2005).

Although there may be some biological factors that may influence children’s behaviours, gendered behaviours related to play appear later in a child’s life and become stronger with age, which suggests the influence of social factors. Serbin et al. (2001) and Jadva, Hines, & Golombok (2010) found boys and girls under the age of 12 months have no preference for feminine or masculine toys, which suggests these behaviours may be learned. This is reinforced by other research which has found that boys are more likely than girls to imitate the behaviour of same-sex role models (Perry & Bussey, 1979), receive stronger reinforcement to avoid activities which are labelled feminine (Fagot, 1977; Lytton & Romney, 1991; Pasterski et al., 2005), and avoid feminine activities when an observer is present (Hartup, Moore, & Sager, 1963). Girls on the other hand are not held to the same expectation of engaging in gender-specific toys.

This early adoption of gender-appropriate activities and types of play may influence the types of physical activity a child engages in later in his or her life. Pomerleau, Bolduc, Malcuit, and Cossette (1990) found the parents of infants 5—25 months of age created environments
which included sports equipment, tools, and cars for boys and dolls and fictional characters for girls.

In her interview with parents, E. Kane (2006) found that parents were open to a variety of different opportunities in physical activity as long as they fit within the parameters of activities that fell within narrowly defined parameters by gendered stereotypes, particularly for boys. Parents were aware of gendered expectations; they also thought they played a role in shaping and constructing it, especially masculinity for their sons (E. Kane, 2006). In his interviews with parents about gender differences in a preschool sports program, Messner (2000) found “parents do not seem to read the children’s performances of gender as social constructions of gender. Instead, they interpret them as the inevitable unfolding of natural, internal differences between the sexes” (p. 770).

In his study of photographs demonstrating 5-year-old boys and girls throwing a ball, Straus (1966) remarked differences about the approaches taken by boys versus girls. Girls were described as not using their lateral space by not stretching their arms, failing to twist their trunks or moving their legs before they threw. The resulting throw was described as a “ball released without force, speed or accurate aim” (Straus, 1966, p. 157), while boys’ throws were described as the ball leaving the “hand with considerable acceleration; it moves towards its goal in a long flat curve” (p. 157). The boys were thought to stretch their arms sideways and backwards, while twisting their bodies and moving their feet so they could step into the throw, which assisted in the boys’ more successful throw. Straus concluded since the observed differences occurred at a very young age, the differences were “the manifestation of a biological, not an acquired, difference” (p. 157). No biological or physiological explanation was given to support his conclusions, nor did Straus give consideration towards the influence of historical cultural, social, or economic limits or factors. Throwing is not the only physical activity in which women are not open with their bodies. When walking, women have a shorter stride and keep their arms closer to the body than men. While standing, women keep their feet closer together compared to men and keep their hands and arms touching or in front so as to shield the body (I. Young, 2005). I. Young (2005) suggests not all differences in physical activity approaches between boys and girls can be accounted for by physical strength or biological limitations. Instead, it is the manner in which each sex uses his or her body’s capabilities to accomplish a physical task. With limited opportunities to explore the physicality of their bodies, girls may lack confidence and may be
tentative when approaching a physical task. This confidence may or may not develop until later in life depending on the opportunities given to girls (I. Young, 2005). When presented with opportunities to engage in physical tasks, girls may underestimate their bodily capabilities and therefore do not put forth a full effort (Gross, 1968). Girls may enter a physical task consciously aware that they do not want to appear physically awkward but also not physically strong (I. Young, 2005). This produces a self-fulfilling prophecy because girls may not be successful at the physical activity because of lack of effort.

Healthism

With Western society moving towards individuals having an increased sense of health consciousness, there has been a growth in the movement of self-responsibility and self-care. This movement has been coined “healthism” by Robert Crawford which he defines as an ideology or set of beliefs that characterize health as an individual’s personal responsibility and moral obligation (Crawford, 1980). Rose describes healthism as “a doctrine that links the public objectives for the good health and good order of the social body with the desire of individuals for health and well-being” (1999, p. 74). Within this ideology, bodies are considered to be worked on, modelled, or manipulated to achieve the coveted final product (Featherstone, 1991; Shilling, 2005). An individual’s body or external appearance is assumed to provide information about a person’s self-monitoring and self-restraint (Bordo, 1993; Shilling, 2005). If an individual’s body size or weight is deemed undesirable by societal standards, it is expected that a regime of exercise and diet should be initiated or the individual runs the risk of being viewed as immoral or pathological (Heyes, 2007). Advertising and capitalist persuasion assist in the internalization of the state’s agenda without requiring state intervention (Rose, 1999). The internalization supports healthism ideology by forsaking logic that social determinants or factors such as poverty, education, racial or gender discrimination, et cetera may contribute to an individual’s health and body shape (White, Young, & Gillett, 1995). Rather, the blame falls solely on the individuals to prevent them from being burdens on the health care system. Health and physical education is wrapped in an ideology of healthism in its assertions to make young people more active, fit, and thin (J. Evans et al., 2008). Health and physical education reproduces discourses that focus on the body as imperfect (through circumstances of one’s class and poverty or self-neglect), unfinished and to be ameliorated through physical therapy (circuit training, fitness through sport and a better diet), threatened (by the risks of modernity/lifestyles of food,
overeating and inactivity) and, therefore, in need of care and being changed. (J. Evans et al., 2008, p. 97)

The body is seen as an individual’s act of labour which requires an individual to produce a body which is desired in a particular culture which meets normalized gender, race, and class ideals (Pronger, 1998). This contributes to the creation of biopedagogies and understanding of biopower, which will be discussed in the next section.

**Biopower**

Power can be a persuasive force and the mechanisms of power can “produce knowledge, multiply discourse, induce pleasure” (Foucault, 1990, p. 73) through “continuous and uninterrupted processes which subject our bodies, govern our gestures, dictate our behaviours” (Foucault, 1980c, p. 97). Power is constant, uninterrupted, and circulates throughout society to influence bodies, behaviours, and experiences. It is not a system of domination of a group that permeates the entire social body, nor is it a complete set of processes that guarantee control of citizens by the state (Foucault, 1990). Rather, it is a subtle and underlying power that impels the discourses which influence individuals’ behaviours (Gastaldo, 1997). Foucault refers to this type of power as biopower which works to manage populations and regulate individuals. Rabinow and Rose (2006) suggest biopower consists of “one or more truth discourses about the ‘vital’ character of living human beings, and an array of authorities considered competent to speak that truth” (p. 197). There must also be “strategies for interventions upon collective existence in name of life and health, initially address to populations that may or may not be territorialized upon the nation, society or pre-given communities” (Rabinow & Rose, 2006, p. 197). Last, there must be “modes of subjectification, through which individuals are brought to work on themselves, under certain forms of authority, in relation to truth discourse, by means of practices of the self, in the name of their own life, or health” (Rabinow & Rose, 2006, p. 197). Contributing to the subtle and coercive nature of biopower is disciplinary power, which works to train or discipline bodies. Bodies are visible, which subjects them to criticism and the gaze of others. In turn, bodies can demonstrate knowledge, be controlled, modified, or fall under surveillance. When a system of surveillance is present,

there is no need for arms, physical violence, material constraints. Just a gaze. An inspecting gaze, a gaze which each individual under its weight will end by interiorising to the point that he is his own overseer, each individual thus exercising this surveillance over,
and against himself. A superb formula: power exercised continuously and for what turns out to be a minimal cost. (Foucault, 1980a, p. 155)

A gaze does not necessarily need to exist in the present moment, but rather the possibility that others may be watching (Dworkin & Wachs, 2009). An individual only has to feel he or she are under surveillance to cause the internalization of monitoring and, in return, employ surveillance on others to train, punish, and discipline their bodies.

On the surface, biopower appears to be in the best interests of humankind because it prevents the demise of the species (Gastaldo, 1997; Wright, 2009). However, biopower “problematized disease as an economic and political problem for societies” (Lupton, 2003, p. 33). As populations have increased and become more fluid and complex, governments have become “more concerned about the management of life (bio-power) and the governing of populations” (Howson, 2004, p. 125). As a result, the control of the social body through life demands a whole new set of strategies through which regulatory power emerged (Gastaldo, 1997). Mechanisms, such as policies and programs are implemented to discipline individual citizens and manage wider populations to regulate any “deviant behaviour” (MacNeill & Rail, 2010; Rich & Evans, 2009b). In order to manage a population, every individual should be reached by techniques of power (Gastaldo, 1997). Regulatory power is concerned about issues that sapped “the population’s strength, wasted energy, and cost money, both because they led to a fall in production and because treating them was expensive” (Foucault, 2003, p. 244).

Regulatory power incites policies to sway populations and disciplinary practices within individuals.

Regulatory power monitors populations through the collection of data and creation of policy. Within Canada, the Canadian food guide and physical activity guidelines published and distributed by the federal government outline the nutrition and physical activity practices Canadians should follow to ensure that they reach optimal health (McDermott, 2007). Unlike other influences of power, individuals are active in their own nutrition and physical activity practices and not merely imposed upon. The emphasis of biopower is on “how the individual constitutes him or herself through a process of subjectification” (Lacombe, 1996, p. 341). The government distributes behaviour guidelines which policy-makers consider mandatory for individuals to achieve optimal health. The guidelines are general guidelines, so they are not personalized to meet every individual’s uniqueness. Instead, individuals are stripped down to a
mould of what “healthy” behaviours should be (Jochelson, 2006). Individuals are responsible for monitoring their own behaviours and making adjustments to meet the established guidelines (Hickey & Fitzcclarene, 1999). The disciplinary and regulatory understandings of biopower are used to inform biopedagogy.

**Biopedagogy**

Jan Wright (1996) first coined the term ‘biopedagogy’ to encompass the instruction individuals receive about their bodies and lifestyle choices. Influenced by Michel Foucault’s articulation of biopower, biopedagogy attempts to understand the modes of subjectification through which individuals work on themselves and the types of surveillance an individual engages for health behaviours (Wright, 2009). The term biopedagogy can be understood as a range of instructions on “bios: how to live, how to eat, how much to eat, how to move, how much to move” (Rich & Evans, 2009b, p. 15). Biopedagogy encompasses all of the instructions about how we should live and is value laden to assist in laying down the rules associated with belonging to a class and culture. Biopedagogies are “any conscious activity [under] taken by people, organizations or the state, that are designed to enhance individuals; understandings of their own and others’ corporeality” (J. Evans et al., 2008, p. 17). The premise of biopedagogy goes beyond the concept of health and “being well.” Biopedagogies can put “individuals and populations under surveillance, provide instruction on health risks, oblige citizens to heed particular responsibilities and encourage self-monitoring” (MacNeill & Rail, 2010, p. 179).

However, biopedagogy does not account for the behaviours of individuals that may be deliberate and counter to the instructions that biopedagogy describes. Individuals may intentionally choose to dismiss instructions about physical activity or nutrition because they question the information or the source. Furthermore, an individual may be unable to follow the instructions because of lack of resources. For example, an individual may not have the financial resources to purchase a gym membership or buy fresh fruit and vegetables each day.

Biopedagogy is reinforced through the use of disciplinary power. Biopedagogy is an extension of biopower (which will be developed further below) and Foucault’s concerns with technologies of the self. Disciplinary power can be understood in terms of the self-monitoring and self-discipline engaged in by individuals as a result of the internalized cultural norms (Foucault, 1991). Disciplinary power is “subtle, constant and ubiquitous power over life” (Gastaldo, 1997, p. 115). This power can be understood as the urging of people to work on
buttering themselves. In the context of the “obesity epidemic,” it can be understood as the behaviours people engage in as they work to prevent themselves from becoming overweight or obese. These behaviours can range from engaging in daily physical activity and restricting their food intake or types of food they consume.

Biopedagogical discourses have become intertwined in everyday life through such discourses as the “obesity discourse,” which increasingly identifies children in a population “at risk” or the “virtue discourse,” which identifies overweight and obese people as immoral. These discourses are distributed through society in media and government reports as well as through fitness and health professionals. McDermott (2008) queries the veracity of the depictions of an inactivity epidemic for children and adolescents. Canadian statistics suggest only 24% of children are inactive while the remaining 76% fall within a spectrum of activity levels ranging from moderate to meeting the “international guidelines for optimal growth and development” (Cameron, Craig, & Paolin, 2005). The public representation of children is one that is overpoweringly inactive because only children who achieve the international standards of energy expenditure are defined as “active” despite a lack of robust research to support the standards (McDermott, 2007). Consequently, organizations such as the Public Health Agency of Canada (PHAC), mobilize children’s normative energy expenditure statistics to justify their intervention in helping children and adolescents develop the physical activity habits which are considered appropriate for these age groups by PHAC (McDermott, 2007).

The labelling of certain children’s bodies “at risk” can be because it can privilege the bodies that conform to cultural standards. It is very problematic within the school environment because school, more than any other social space, is a place where perceptions of appearance and difference shape children’s sense of belonging and standing (Rice, 2003). For girls especially, associations are made between an idealized face and body features with social power and popularity, which teaches children that an attractive appearance is a cultural requirement of gender (Currie, 1999; Thorne, 1999). Children who “diverge from cultural standards often experience devaluation of physical differences as a result of stereotyping and stigma” (Rice, 2007, p. 159).

There are multiple biopedagogical sites which exist within Western society. These sites “have the power to teach, to engage ‘learners’ in meaning making practices that they use to make sense of their worlds and their selves and thereby influence how they act on themselves and
others” (Wright, 2009, p. 7). These sites are not limited to just schools but include the media, advertising and public health campaigns, as well as government-issued health guidelines, which will be explored in this dissertation.

**Chapter Conclusion**

Schools are one of many important institutions in the socialization of youth and their understanding of biological assumptions and gendered behaviours. The policies, programs, and pedagogy utilized in the school environment shape students’ discourses surrounding their bodies and expectations. Schools are used to monitor and regulate bodies to ensure that productive and healthy individuals are produced at the end of the schooling process. Power relationships shape the knowledge and truth used in the social forces and disciplinary practices to mould students’ bodies. Although physical education was once used to prepare soldiers for war, it is now being used to fight the “war on obesity.” The focus of physical education and the techniques employed in the classroom may have changed over time, but the primary goal of making kids “healthy” has remained the same. However, the decline in physical activity levels despite the increase in the number of school policies to encourage physical activity suggests that the current policies do not work. The utilization of the intersection of sex and gender to examine the current Ontario physical education policies may shed new light on the effectiveness of the current and future policies. Do differences exist between the actualization of the policies between boys/males and girls/females which impacts the effectiveness of the educational policies? Furthermore, youth are thought to be “at risk” and need to be protected, but do students feel this way? Do the current policies fail to meet the needs of the students, or do the students not think they need them, which limits the policies’ effectiveness?

Physical education is a unique subject because of the biological differences assigned to each sex and the social roles assigned to each gender. No other subject has difference expectations or course content for boys and girls. These differences are reproduced in discourses and through students’ behaviours and are rarely questioned. As a result, girls and boys may be disadvantaged because of the stereotypes surrounding expected behaviours. What are the discourses students consume with respect to their gendered bodies in physical education? Why are these differences accepted and rarely questioned by the students?

Teachers play an important role in knowledge production and reproduction of gendered behaviours and expectations. It is their knowledge, understanding, and experiences which shape
the pedagogy and experiences of their students. The same pedagogical ideas and practices may not change with each generation of teachers, which may contribute to the continued ideas surrounding physical ability and sex/gender. The implementation of the policies in schools may be affected by stereotypes and narratives, because teachers may not think ideas surrounding sex or gender can be challenged because they are accepted as “natural differences.” At what levels of education are these ideas reproduced? When and how do these ideas get challenged?

The corporeality of health and physical education and the disciplinary practices within it dictates the particular ways that students should monitor and regulate their bodies. The body has become a normalized entity which requires a student to align his or her body with the societal image of masculinity or femininity. In the school environment, students learn the normalized behaviour and techniques for monitoring and regulating their gendered bodies.

Physical education policies typically target a particular behaviour but do not encompass the complexity of the problem. A policy may target physical activity levels or eating behaviours but not see these behaviours as complex and difficult to disentangle from each other. Issues such as access to resources, personal interests, and gender may also be ignored in these policies, but they should be considered as they may play a role in the policies’ effectiveness. It is therefore important that these issues are examined and the intricate connections between them are acknowledged. This study will examine the intersection of sex and gender and its impact on physical education policies.
CHAPTER 3: RESEARCH METHODOLOGY

Studies in the field of education can provide information about the complex and interconnected systems which control, direct, guide, inform, and transform the individuals within the system. Examining the policies that are used to inform educational practice and the policy interpretations at both broad and narrow levels can provide insight into the social construction of the school environment. Qualitative methodology, informed by critiques of biopedagogy and feminist cultural studies, will be employed to examine the research questions in this study. Critical policy analysis, interviews with school officials, and focus groups with students will structure the methodology used in this study.

Qualitative research involves the studied use and collection of a variety of empirical materials which qualitative researchers use to “deploy a wide range of interconnected interpretive practices, hoping always to get a better understanding of the subject matter at hand” (Tedlock, 2005, p. 4). Qualitative approaches provide the opportunity to develop an understanding of the educational discourses through the lens of its participants. A quantitative approach to educational discourses is not appropriate because of the “complex and dynamic contexts of public education in its many forms, sites, and variations, especially considering the … subtle social differences produced by gender, race, ethnicity, linguistic status or class” (Lincoln & Cannella, 2004, p. 7, as cited in Denzin & Lincoln, 2005b). Qualitative methodology provides a number of different venues to explore issues surrounding sex and gender in education. In fact, Lincoln and Cannella (2004) suggest “multiple epistemologies and methodologies are not only worth having but also demanded if policy, legislation, and practice are to be sensitive to social needs” (p. 7, as cited in Denzin & Lincoln, 2005b). Qualitative research is an interpretive, naturalistic approach to understanding participants’ educational environment. Qualitative research is “a situated activity that locates the observer in the world” (Denzin & Lincoln, 2005a, p. 3). Qualitative researchers “study things in their natural setting, attempting to make sense of, or interpret, phenomena in terms of the meanings people bring to them” (Denzin & Lincoln, 2011, p. 3). Collecting data in the educational setting provides depth to the data collected in this research study.

A systematic inquiry of our educational policies, procedures, pedagogy, curriculum, and the embodied experience can assist in the development of informed policies rather than the current reactionary approach. Education policies may be a response to capital or economic
considerations as well as a consequence of struggles within the wider social forces (I. Gough, 1979). Pressures to create policy may attempt to challenge or reinforce the status quo (Bell & Stevenson, 2006). Neoclassical experimentalists suggest that evidence-based medical research should be used “as the model for educational research, particularly the random clinical trial” (Howe, 2004, p. 48). However, providing subjects with a pill or a placebo in a random clinical trial is different than dispensing curriculum, and the effects of an educational experiment cannot be easily measured such as a five-point reduction of low density lipoprotein cholesterol levels (Howe, 2004; Tedlock, 2005). Hitchcock and Hughes (1995) suggest “the complexity of education demands the use of many different research techniques and methods as a way of interpreting social phenomena in education” (p. 25). Qualitative methodologies can provide the different techniques to explore students’ interpretations and construction of their social reality in the context of the education system with particular pedagogical practices and policies mediating.

In a biopedagogical framework, the instructions individuals receive about appropriate health-related behaviours as well as the influence of sex and gender can be used as an analytic technique to conceptualize and deconstruct the role of cultural norms in influencing the interpretation and actualization of physical education policies (Harwood, 2009; Kirk, 1999). If education is influential to youth, it is imperative to ask critical questions about how the policies are created, interpreted, delivered, and actualized. This chapter outlines the use of qualitative research methods that were deployed to ask questions as a means of broadening our understanding of what assumptions of sex and gender mediate health and physical education policies, programs, and pedagogical practices as well as the impact the intersection of sex/gender has upon students within biopedagogized physical education. Various methodologies were employed, and the study occurred in three different segments: policy and text analysis, interviews, and focus groups.

Acknowledging the many paths of interpretative research, based on the feminist physical cultural studies, a qualitative lens was used to examine past and present health and physical education policies. Physical cultural studies allow the amalgamation of different approaches for knowledge representation, to present participants’ realities and recognize that knowledge must be contextualized based on class, gender, et cetera and located within the participants’ perspectives (Creswell, 2013). Using multiple methods of data collection within the stages of knowledge production provided possible multivocal perspectives of the creation, interpretation, delivery,
and actualization of physical education policies. In keeping with feminist physical cultural studies, this research study interprets the participants’ experiences with the physical education policies. It is acknowledged that knowledge is socially constructed and that “researchers do not claim to be capturing truths, rather they are concerned with how individuals, groups, cultures, and institutions construct realities and with what effects” (Wright, 2004, p. 23). A feminist physical cultural framework places the researcher within the study, which can assist in conducting research that is transformative and examines established relationships (Creswell, 2013). A feminist approach acknowledges power differentials and seeks to understand how power is expressed and impacts individuals’ experiences (Ristook & Pennell, 1996). A feminist research approach understands that gender can be an organizing principle that can shape an individual’s life (Creswell, 2013; Lather, 1991). Furthermore, a feminist approach frames the research to identify “the political choices and power driven ideologies and embedded forces that categorize, oppress and exclude” (Marshall, 1997, p. 13).

The research questions guiding this study require multiple methods of data collection: policy and discourse analysis, interviews, and focus groups. Multiple methods are used to provide rich description, depth, rigor, and complexity to our understanding of the intersections of sex and gender within physical education policies (Tedlock, 2005). Furthermore, “the process of corroborating evidence from different individuals, types of data, or methods of data collection in descriptions and themes of qualitative research” (Creswell, 2008, p. 266) can add to the credibility of the analysis performed. Informed by feminist physical cultural studies, the multiple methods employed will not capture an objective view of reality; rather, the data collected will present a picture of the complex social realities that are established and produced by the study’s participants (Marshall & Rossman, 2011).

The research methodology selected to inform the research findings is described in the following sections, which links the epistemology and the theoretical means. The first portion of the chapter outlines the utility of policy and discourse analysis, interviews, and focus group methodologies. In addition, fundamental qualitative methodological issues, reflexivity/positionality and ethical/power relations are presented and discussed. The second portion of the chapter precisely outlines the data collection and analysis. Details are provided about the participant recruitment, research location, transcription, data coding, and analysis.
Policy & Discourse Analysis

Research can play a significant role in informing and shaping educational policy and practice. It can be argued that physical education discourses are similar to health discourses, which may appear to fade in and out of significance, but it would be erroneous to assume that this is an arbitrary process (Robertson, 1998). Within my own teaching and educational experiences, I have witnessed many difference educational discourses that vary in importance depending on different community, political, and social pressures that exist at the time. Discourses can “emerge and gain widespread significance primarily because they are more or less congruent with the prevailing social, political and economic context within which they are produced, maintained and reproduced” (Robertson, 1998, p. 155). Critical discourse analysis “aims to show non-obvious ways in which language is involved in social relations of power and domination, and in ideology” (N. Fairclough, 2003, p. 299). Discourse analysis is not looking for an underlying “truth” but rather the sociocultural and historically grounded processes which contribute to the deeply held beliefs or assumptions of human subjects.

Educational policy studies usually take two parallel approaches; they examine the government’s education policy statements and documents or they examine implementation of education policy (Penney & Evans, 1999). However, an approach which bridges the two types of research and examines the policy with its implementation and practice is needed (Goodson & Mangan, 1992). Contemporary research in education has “sought to gain a better understanding of the relationship between policy statements issued by identified ‘makers’ of policy and the often contradictory, contrasting and unintended practices subsequently arising in schools” (Penney & Evans, 1999, p. 20). This study examines the discursive practices of policy interpretation and actualization by key stakeholders. An interpretive policy analysis approach was used to focus on the “meanings of policies, on the values, feelings, or beliefs they express, and on the processes by which those meanings are communicated to and ‘read’ by various audiences” (Yanow, 2000, p. 14). In my own experience, often the staff and students who are most impacted by these policies are not given a seat at the table when they are created. Nor are they given opportunities to provide feedback or modify them after the policies are implemented. This study provided staff and students an opportunity to reflect on the past and current policies and provide feedback.
While a traditional policy analysis may evaluate the value of a policy, a critical policy analysis attempts to examine the associations between a policy’s content with its context and process (Collins, Green, & Hunter, 1999; S. Duncan & Reutter, 2005; Walt & Gilson, 1994). A critical policy approach scrutinizes the underlying values and ideologies which surround the issues and proposed solutions as well as the inclusiveness and exclusiveness of the policy (Fischer, 1993, 1995). A critical analysis exposes the organizational processes as they relate to the manner in which individuals experience the policies (Habermas, 1973; A. Pettigrew, 1987). Critical policy analysis strives to “speak the truth to power” (Orsini & Smith, 2007, p. 1).

Examining the different power relations or inequities is also an integral part because power can support certain interests over others as well as the underlying ideology (Alvaro et al., 2011). This study utilizes a critical policy approach to examine the social, political, and cultural context and processes which influence the creation of physical education policies. Furthermore it was used to understand the different power relations which influence the creation of the policies and the underlying ideology which drives them.

The textual analysis of Ontario physical education policy explores dominant discourses and subjective knowledge that can circulate in policy. Texts have the ability to change beliefs, attitudes, and values (N. Fairclough, 2003). A text analysis can explain “why, at a given time, out of all the possible things that could be said, only certain things were said” (Ball, 1990, p. 3). Texts are reflective of the people, time, and place but are also representations of interpretations and symbolic mediations that produce social events and people (Denzin, 1997). Texts are also representations that map out discourses which occur in a given social space.

However, N. Fairclough (2003) warns that no textual analysis can be definitive or conclusive because complete understanding of a text is impossible. Data are socially constructed in the sense that what “counts as data depends on what we judge to be important in the first place, then what to measure” (Robertson, 1998, p. 158). Text analysis is fundamentally selective and partial because a researcher can chose to ask certain questions while forgoing others because of individual motivations (N. Fairclough, 2003). Therefore, text analysis in isolation is insufficient because text is a reflection of specific ideologies, systems, time periods, et cetera. Therefore, guided by this advice, this research attempted to connect the textual analyses of the policies along with focus group interviews within the broader social, economic, and political
contexts while also considering the impact of the intersection of sex and gender on what assumptions of sex and gender mediate health and physical education policies.

The production of curriculum is a form of power, as it can produce particular types of disciplines and subjectivities (M. Apple, 1979; M. Young, 2008). Foucault considers discourse to be a constructive and constitutive practice that facilitates writing, speaking, and thinking (Holstein & Gubrium, 2011). Discourse is an instrument of power but also an effect of power (Hook, 2001). Education policy can set up boundaries that limit and impede an individual’s ability to think outside of the established discourses (M. Apple, 2011; Cronin-Jones, 1991). Sex and gender can establish boundaries which may influence an individual’s behaviour because of power relations (Bottorff, Oliffe, Kelly, & Chambers, 2012). Therefore, performing a discourse analysis is also analyzing the specific relations of power and/or knowledge (Mills, 1997). In understanding that multiple interpretations exist, these methodological insights encourage me to analyze multiple education policies to understand power/knowledge relations, as these positions can impact the interpretation by stakeholders. Knowledge is intrinsically woven with power relationships because it is used to regulate social behaviours (S. Hall, 2001). Foucault (1972) proposes that objects of knowledge exist only if they have meaning, and discourses produce knowledge, not behaviours or a physical item (S. Hall, 2001). As a result, nothing has meaning outside of a discourse (Foucault, 1972; S. Hall, 2001). It is important that the interconnectedness of power, knowledge, and discourse is recognized in textual data analysis because the body or gender may be produced within discourses and central to techniques of regulation (S. Hall, 2001). Power relations may influence the discourses, which translates to knowledge produced in school through health and physical education policy.

Language is important in this research study as, when its combined with discourse, it provides patterns, gives meaning, or can be used to understand the organization of the world. Ranges of cultural, social, and historical forces are available and contribute to the subject at any given time. This influences the language used in policy and to justify policy.

**Interviews**

Within qualitative research, interviews can provide meaning about a person’s experience as well as the interpretation of social events and phenomena (Ary, Cheson Jacobs, Sorensen, & Razavieh, 2010). Patton (1990) suggests “interviewing begins with the assumption that the perspective of others is meaningful, knowable, and able to be explicit” (p. 278). Interviews can
help to understand what has happened, how it happened, and why (T. Pettigrew, 1996). The interviewer and the interviewee co-construct data, as together they “play interdependent and equally complicit roles in the construction of narratives” (Atkinson, 2003, p. 83). This type of data collection allows for opportunities to dig deeper into a topic because the researcher is not held to the rigidity of other types of data collection, such as a questionnaire.

Interviews with key informants at the school board and within the school environment provide context to the implementation of health and physical education policies and as they are stakeholders and provide influence in the process. Key informants also provide insight into the experiences of young men and young women from their perspectives of being observers in the environment.

**Focus Groups**

Focus group interviews can provide rich data because of their interactive approach and setting. The purpose of focus groups is to “learn through discussion about conscious, semiconscious and unconscious psychological and sociocultural characteristics and processes” (B. Berg, 2001, p. 111). Focus groups allow members to challenge each other, develop positions of consensus, and build on each other’s ideas, which builds a stimulating environment for data collection (Amis, 2005). Further, a focus group setting can make participants feel more comfortable in a group setting and overcome intimidation which may occur in a one-to-one interview (Amis, 2005; Krueger, 1994). Focus groups are thought to be less threatening to the participants, and the less threatening environment will be helpful for participants to discuss their ideas, opinions, thoughts, and perceptions surrounding the policies (Krueger & Casey, 2000).

Focus groups were selected to examine the students’ experiences with the current health and physical education policies within the school environment. Collecting the data through small focus groups provided the students with an opportunity to discuss some of their shared experiences, while at the same time discussing their diverse experiences. Focus groups allowed the participants to interact with each other and respond to other participants’ comments as well as provide more details or insights (Hyde, Howlett, Brady, & Drennan, 2005). Focus groups helped some students who may be shyer about discussing a topic because the discussions of others helped to break the ice (Kitzinger, 1994). The focus groups provided the students with an opportunity to collectively discuss their experiences. The focus groups also afforded the
researcher the opportunity to collect student voice, which is sometimes lost or forgotten within educational institutions.

**Reflexivity & Positionality**

Representing social phenomena is complex, and is evident in the narratives that people tell about their social world. People emphasize or omit different things when telling a story and this impacts what a researcher knows (Sparkes, 2002). When conducting qualitative research, it is as much about what people are saying as it is about what they are not (Coffey & Atkinson, 1996). The narratives, observations, dialogues, and policies I use in my analysis are a construction of the social and historical factors present at the moment of knowledge production. Researchers and participants jointly produce knowledge and coconstruct the data (Davis, 2000; Hammersley & Atkinson, 1995). A participant’s story will change over time and reflect social norms. The participant as a storyteller will continuously construct and reconstruct past and lived experiences told through their narratives (McAdams, 1997; McLeod, 1997). Young men and women are active agents in an ongoing process of creating and recreating gender identities created from history and socially specific sets of beliefs, statements, and actions which make up discourses (Butler, 1990; Weedon, 1999). Bodies are not fixed or rigid objects, they are both performative and materialization of discourses (Butler, 1993). These discourses have material implications and cannot be disconnected from an individual’s social reality and his or her construction of an identity. The narratives people present may be reflective of the experiences and their influences on the degree of embracement of their gender role.

While remaining connected to the social world and valuing the human experience, the qualitative researcher is part of the interpretation of the social world (J. Morse & Field, 1995). A qualitative researcher “cannot claim to be an objective, authoritative, politically neutral observer standing outside and above the text” (Gibbs, 2007, p. 91). Therefore, steps and processes of selection guided by reflexivity are taken to research and represent people’s realities with “acute awareness as to the contributions of hidden or unrecognized elements in the researchers’ background” (Olsen, 2005, p. 251).

“All scholarship is partial” (King, 2005, p. 28), so it will be important to continuously question what I hear, see, and what relationships are formed while conducting my research. Feminist research draws attention to the power differentials and the importance of understanding the dominant and marginalized experiences in order to understand how power is expressed.
(Ristook & Pennell, 1996). As a result, an increased focus is on the positionality of the researcher and the power relationships which exist in the research. Duncan and Sharp (1993) suggest research “requires a continual and radical undermining of the ground upon which one has chosen to stand, including, at times the questioning of one’s own political stance” (as cited in McEwan, 2009, p. 201). My position as a researcher and role as an educator will continuously challenge my subjectivity in the research process. My position as a Caucasian teacher who is a university-affiliated young woman will both facilitate and constrain my interactions and relationships in various aspects of the study. As a professional educator, it may be difficult to separate my educational background and experience in the field from my research. Furthermore, my position as an educator may also influence my interactions with the participants in the study. Understanding my position in the research environment is important to my subjectivity and is a vital consideration throughout my research. It is also vital to recognize that I will be constituted by and constituting power relations. As a educator with a graduate degree, speaking with children or fellow educators, I may be seen by participants as in a power position, which may influence the dialogue (Tang, 2002). Power dynamics may help or hinder conversations because participants may feel more or less comfortable in my presence (May, 2009). Therefore, my various subjectivities and any resulting power dynamics were acknowledged and questioned throughout my research. During the construction of data, I attempted to make participants comfortable in the research processes by acknowledging that they are joint producers in the knowledge created in this study (Davis, 2000). I also made them aware that they do not need to do or say anything they do not feel comfortable saying or doing and can remove themselves from the study at any time. I allowed the interviews to take place in a location picked by the participant (Sin, 2003). For the focus groups, I attempted to pick a neutral location by using the library conference room to try to reduce any power relations. Last, I made all attempts to ensure the questions asked were at an appropriate level of language and was aware of my body language so as to not deter the participants (Tang, 2002).

However, my experiences as an insider within the education field assisted in driving this research study because of an insider view of gaps in the literature. No current research study has examined the effectiveness of the current physical education policies in Ontario, and the effectiveness of these policies are therefore not questioned by those who implement them. My experiences in the educational environment provide me with an understanding the intersection of
sex and gender may impact the effectiveness of any physical education policy as well as individual’s behaviour. Last, my career as a secondary school teacher provides me with insight into the educational structures and processes, school culture, and student relations.

**Ethical Considerations While Constructing Data**

It is important that ethical considerations are taken to ensure research is not harming to the participants (Amis, 2005). Research can be used to empower participants; however it can also disempower if the researcher’s actions are harmful or the research findings are misused (Amis, 2005). This study involved human participants and, therefore, an ethics review was completed through the University of Toronto Research Ethics Board and through the District School Board Research Ethics Board.

Obtaining informed personal consent is an important step before the collection or construction of any data. Personal consent is the participant’s agreement that he or she will contribute to the research. Informed consent was obtained from all key informants and focus group participants. With respect to this study, consent was obtained from various school board staff, the school principal, the school department head, parents, and students. The parents and students also received two copies of an informed consent form so that one copy could be returned to the researcher and the parents could keep one copy for their records (see Appendix A). Parents were asked to sign the informed consent form on behalf of their child that acknowledges their understanding of the research, recognized their child’s role in the study, and granted permission for their child to participate in the study. The student participants completed an assent form (see Appendix B). This form ensured the students were reminded of their role in the research and were aware of their rights and responsibilities. Any students 18 years of age or older were allowed to sign their own form without parental consent.

Participation in the research study was optional for all participants. The participants were notified of their right to withdraw from the study at any time and for any reason, on the informed consent form and student participants’ assent form. Participants were informed that if they withdraw from the study, their data would be destroyed and not used in the final data analysis. Before beginning any aspect of the study, the participants were reminded of this right through verbal instructions given to all participants. None of the participants in this study chose to withdraw.
Confidentiality is an important part of ethical research with human participants. Several steps were taken to protect the privacy and rights of the participants. These included safe storage of data and not using identifying characteristics.

In this study, no confidential information revealed by participants was shared with anyone except the researcher. To keep the information confidential, several precautions were taken. All field notes and recordings were stored in a secure location. To protect the data, only the researcher had access to this location. All electronic data were stored on a password-protected computer.

To maintain confidentiality, all interviews were conducted in a private location. To maintain confidentiality of the focus groups, all participants were asked at the beginning of the focus group to keep all information discussed within the confines of the room.

Anonymity is not possible in some aspects of this study, such as the focus groups. However, in this study, aspects of anonymity were maintained by removing any distinctive character or recognition factors from interviews or field notes collected.

In the reporting of this study, participants were described collectively or in general terms (e.g., young men or young women). As well, the names of the school and school board are not reported in any findings. Only general descriptions of the sites (e.g., geography, size, location in Ontario) are reported. Pseudonyms were also used for all participants or references to people so as to prevent any identification.

**Power Relations While Constructing Data With Young People**

Young people are active participants, socially mature beings, and highly competent interpreters of their environment and can contribute to the co-construction of data (Danby & Farrell, 2004; A. James, Jenks, & Prout, 1998; Mayall, 2003). Young people’s comments may be tempered by the circumstances of the data being constructed with an adult (Danby & Farrell, 2004). Structural conditions and power conditions exist in the construction and interpretation of the data (Foley, 2002; Pillow, 2003). It was a conscious decision throughout the study to acknowledge the power relationships as well as social, cultural, and historical contexts of the study and the perspective of the young people (Danby & Farrell, 2004). It is therefore important when engaging in the coconstruction of data with young people and to establish trust and rapport to increase their ease in conversation. Although at one time I was employed within the school where the research took place, I was not the teacher of any of the participants at the time of data
construction. The students were made aware that their participation or lack of participation would not impact them academically. The previous interactions with the students did not eliminate inherent power differentials but did assist in establishing trust and mutual respect.

**Research Methods: Transitioning from Collecting Data to Constructing Data**

When conducting research it is important to utilize the ontology and epistemology of the field of study to inform the methodology. Instead of collecting data as an act of retrieving an item, data are constructed within social, historical, and cultural contexts. It is also constructed within participants and their interactions within their environments as well as between participants and the researcher. Qualitative approaches to the construction of data were utilized in this study to add to the body of knowledge that currently exists surrounding the impacts of health and physical education policies and the experiences of young men and women within the school environment. It is important for researchers to account for the procedures they follow and the theoretical assumptions which impact decisions about the collection and presentation of data and the voices of the participants. Data are collected in a specific time and place; therefore if researchers do not “articulate how, how not, and within what limits, it is a failure of methodology” (Fine, 1992, p. 219). It is therefore prudent of the researcher to outline the procedures followed to ensure the readers are not left depending on “the researcher’s selection and contextualization of interview statements” (Kvale, 1996, p. 207). This assists the reader in understanding the research findings.

This section details the three different methods: policy, interviews, and focus groups, employed in this research study in the construction of data and extracted to inform the research findings. The techniques, procedures, and strategies employed to construct, interpret, and analyze the data generated over a 3-month period from April 2013 to June 2013. Last, the section concludes with the data analysis and coding techniques.

**Conducting Health and Physical Education Policy Critique**

The Ontario government outlines the health and physical education policy for the province, but the interpretation of the policy is left up to individual school boards. It also provides resources, such as the *Foundations for a Healthy Schools Resource* (2014) which can assist schools and school boards in their implementation of policies (Ontario Ministry of Education, 2014). Examining different school board policies will assist in developing an understanding of
the interpretation of policies within school boards. The discursive practices of producing a protocol or a school board specific policy is an important consideration when thinking of the narratives in education policy because it may assist in understanding discourses and power relations influencing assumptions underlying the intersection of sex and gender.

All health and physical education policies were obtained online from the government of Ontario’s website or from various school board’s websites. The specific documents that were analyzed in this study were:

5. Ontario PPM 150 School Food and Beverage Policy (Ministry of Education, 2010b)
6. Healthy Food for Healthy Schools Act (Ministry of Education, 2008)
7. Trans Fat Regulation (Ministry of Education, 2008)
9. Halton District School Board Healthy Food For Healthy Schools Protocol (Halton District School Board, 2011)
11. York Region District School Board Healthy Schools and Workplaces Framework (York Region District School Board, 2014)

Although not all policies adoptions, or frameworks, for the 72 school boards in Ontario (Ministry of Education, 2014) were examined, the adaptations of ministry policy varied little between boards. Additionally, these frameworks and/or policies were used as an understanding of policies’ interpretation at the school board level and therefore reviews of all school boards were not necessary.
Conducting Focus Groups

All focus groups were conducted in the library seminar room on the school premises. The seminar room provided a quiet environment with no interruptions. Focus group interviews occurred during the lunch hour, which was 75 minutes. This prevented disruption to the participants’ classes. Given the timing of the focus groups, participants were compensated with food and drinks for their participation. The focus groups were approximately 45 to 60 minutes in length. In total, focus groups were conducted with 83 students (28 young men, 55 young women) ranging from Grades 9 to 12. Students varied in ethnicity and academic pursuits.

Focus groups were conducted as single or mixed sex based on participant preference, and the focus groups contained 7–10 participants. Students were given the option of participating in a single-sex focus group because participants may feel more comfortable discussing their thoughts and feelings without the presence of the other sex. In addition, in a focus group environment, participants may feel they need to “perform” their particular social role (Crossley, 2002). Therefore, keeping the focus groups single sex may prevent the students from having to perform their gender role. However, some participants requested a mixed focus group because they stated they felt more comfortable with their friends of the opposite sex and felt they would provide deeper and richer dialogue with a mixed focus group. Prior to commencing the focus group, I outlined the nature of the research and reminded participants of the informed consent and assent forms. Students were also reminded of their right and ability to withdraw from participating at any point during the research. A semistructured focus group guide was used in each focus group, and the focus groups were tape-recorded (See Appendix C). Although the guide was used for generating some questions within the focus groups, the participants determined the direction of the conversation and I limited my guidance in the discussion. At the onset of this research study, the use of more inclusive gender identity terms such as agender, cisgender, transgender, et cetera was not commonplace within school environment or policy. Focus group questions are reflective of the language at the time of the research and may not reflect the transition to more inclusive language which is currently happening in Ontario schools.

As a previous educator within the research setting, this provided the participants with some familiarity and comfort with my presence in their conversations. When the conversations would veer in another direction, techniques such as asking thought-provoking questions were utilized to
further the discussions. While all participants had the opportunity to participate in the discussion, some participants were more reluctant until some prodding and encouragement were given.

**Conducting Interviews**

After examining the process of policy implementation within a school board, I was interested in examining how key informants consume and guide health and body discourses as well as sex and gender discourses in the construction of health and physical education policies and programs within the school environment. I determined the key informants in the policy process and used purposeful sampling to interview someone from each level of implementation of the physical education policies. Informed consent was obtained from the key informants, and interviews were scheduled for a time and location that was convenient to the participant (See Appendix D). Locations for the research varied from locations within the school and school board premises. Interviews were audio-recorded with consent of the participants.

Although I had originally planned on conducting 6 one-on-one interviews, in the end I conducted 12 interviews. The extra interviews came to fruition as suggestions from other key informants about beneficial insights other individuals may be able to provide to this study. Interviews occurred between the school principal, health and physical education teachers, the instructional program leader for health and physical education, school cafeteria staff, and the system level principal for health and wellness policies.

The interviews ranged from 45 to 60 minutes in duration. In semistructured interviews, key informants were asked about their experiences with the policies as well as the key messages within the policy and the ideology that drives them. Informants were also asked about the differences between boys and girls in their physical education experiences. Semistructured interviews permit active dialogue and conversation; they were guided by standard questions about key education stakeholders who influence the implementation of education policy. Preestablished questions informed by themes that were identified in the policy analysis were used to establish standard questions. The interviews began with a series of introductory questions, followed by specific questions about their interpretation of the policies, and concluded with questions about their contributions to the implementation of the education policy (See Appendices E, F, G, H). Although the preexisting questions were used to guide the interviews and served as a framework, there was not a prescriptive or rigidity that required strict adherence
to them (Atkinson, 2003). As new themes or questions emerged through conversation, they were used to explore a topic and dig deeper.

Interviewing is an interactive encounter between the researcher and the participant. Researchers and participants jointly produce knowledge and its interpretation (Davis, 2000). Semistructured interviews allow participants the “ample freedom and time to unfold their own stories” (Kvale, 2007, p. 57) and provide the researcher the opportunity to “follow up with questions to clarify the main episodes and characters in the narratives” (Kvale, 2007, p. 57). When interviewing, it is important to recognize that people may emphasize or omit different things when telling a story, which may impact what an interviewer may know (Sparkes, 2002). Over time, an individual may forget details or be unable to recall events because of a faulty memory (Fontana & Frey, 2000). Anticipating this, I provided the participants with the different policies ahead of the scheduled interview as well as presented the policies during the interview with the intention that this might assist in the recollection of their experiences and interpretation of the policies.

**Recruitment of Participants**

Formal institutional consent was obtained from University of Toronto (see Appendix I) and the District School Board for the interviews and focus groups. After approval from both institutions, the school’s principal was approached about conducting focus groups within the school (see Appendix J). A meeting occurred between the principal, physical education head, and the researcher to discuss the research; particularly methodology and research, and the study’s impact on the school, students, and teachers. The principal was given copies of all instruments and documentation to be used during the research process.

Participants for the focus groups were recruited after obtaining principal consent to conduct research in the school. Teachers were approached to make classroom visits to recruit participants for my focus groups. Students were informed through classroom visits of the possibility of participating in focus groups (see Appendix K). Interested students were provided with a letter of information, informed parent consent form, and assent forms (see Appendices A, B). Students were instructed to return the parent consent and student assent forms by the suggested dates to their classroom teacher or the main office. Follow-up visits and reminders were given to students. Any student who wanted to participate in the research study was given an opportunity to do so. As such, convenience or criterion purposive sampling was used in this
study (Loftland & Loftland, 1995; Miles & Huberman, 1994). Focus group participants were offered food and drinks for their participation in the focus groups, and participation in this study did not require any expense on the part of the participants.

Participants for the interviews were invited to participate based on their status as a key informant in the implementation and actualization of health and physical education policy within the school and school board. Each physical education teacher within the school was informed about the methodology of the research and the impact it would have on his or her classes (See Appendix D). All of the physical education teachers were given the opportunity to participate in an interview at a time and place that was convenient to them. The research is designed to accommodate teachers and classroom practices as well as minimize interference to classes.

School board staff were given a letter of invitation to inform them about the research study and invited to participate in an interview (See Appendix D). Each key informant was given two copies of the informed consent form so that a copy could be retained for their records (See Appendix D).

**Research Locations**

The research was carried out in a number of different locations in a public school board in the Greater Toronto Area, Ontario, Canada. To protect the confidentiality of the staff and students, the school board will be referred to as Public District School Board (PDSB). Locations for interviews were chosen based on convenience to the participants. The student focus groups were conducted at one secondary school (Grade 9 to Grade 12) within PDSB and will be referred to as Greater Toronto Secondary School (GTSS). GTSS is located in a neighbourhood with most students self-identifying as “middle class” or “upper middle class” and a small number of students identifying as “low income.” While the majority of the students were Caucasian, all the participants were born in Canada. Data from the National Household Survey (2006) indicate the school is located in a neighbourhood which is characterized with a zero on the social risk index, and less than 10% of the families are classified as low income (Statistics Canada, 2011). Last, less than 2% of the school’s population are recent immigrants and has an unemployment rate of less than six percent.

The school is a public school, which requires no fees, payments, or tests to attend. At the time of the study, the secondary school’s population was approximately 1,100 students and was closed from optional attendance; thus students were allowed to attend the school only if they
lived within school boundaries designated by PDSB. With a research study of this magnitude, access to students within a public school may be difficult without support of the school staff. This school was selected because of familiarity of the research site by the researcher, and access was granted by PDSB and school principal. Among the public secondary schools within the region, this school is widely known for its athletics, with many students receiving athletic scholarships, and for high academic standards among the students. GTSS prides itself on tradition, and many of the students have parents and grandparents who attended the school.

Transcription

“An interview is a construction site for knowledge. An interview is literally an *inter view*, an inter-change of views between two persons conversing about themes of mutual interest” (Kvale, 1996, p. 14). All of the audio-recorded interviews and focus group sessions were transcribed for use in data analysis. Limitations occur through the process of transcription as the product de-contemporizes and de-contextualizes the conversations (Kvale, 1996). It can be argued that there is no replacement or authentic text which can recreate the authentic conversations, but “the idea(l) of an original and complete voice recording from which something is rendered is also problematic” (Fusco, 2003, p. 146). In a positivist and empirical framework, an “obsession for completeness” (Trinh, 1989) or pursuit of the “truth” might cause questions over the validity of the transcribed data. In the form of text, a transcribed interview or focus group discussion can have different interpretations every time it is read (Denzin, 1995; Kvale, 1996; Poland, 2001). “No system could conceivably show everything, and it is always a matter of judgment, given the nature of research questions, what sort of features to show and in how much detail” (N. Fairclough, 1993, p. 229). Instead of focusing on the questions of validity or “authenticity” of the data, a researcher can focus on the most useful transcript for the purposes of the research (Oliver, Serovich, & Mason, 2005). As in critical discourse analysis, a purpose of this research was to get at “*emic* points-of-view, or inside meanings, that are attached to social phenomena” (Oliver et al., 2005, p. 1278). Since the process of transcription is part of data construction with the participants, a decision was made to transcribe the interviews and focus groups verbatim in an attempt to capture the voices and ideas of the participants’ in the manner in which each spoke. By attempting to stay true to the participants words and actual speech, participants’ words are privileged and priori assumptions may be avoided (Schegloff, 1997). Articulated speech is used “because it is the orientations, meanings, interpretations,
understandings, etc. of the participants… it is those characterizations which are privileged in the constitution of social-interactional reality, and therefore have a prima facie claim to being privileged” (Schegloff, 1997, pp. 166–167). Keeping the transcript in a natural or verbatim state, the participants have their own voice and are able to speak for themselves. In an attempt to work within the confines of transcribed data and how ideas are conveyed by the participants, I wrote notes about body language, facial expressions, tone of voice, during the interviews and focus groups. During the focus group sessions, I also created notes about the interactions between the participants to assist in my understanding of the construction of the data. By combining my written notes and verbatim transcripts, it was my attempt to construct the data with the participants.

**Data Coding and Analysis**

The methods used for qualitative research serve as the strategies used to organize, collect and analyze data, while the approach to research remains sensitive to the process of data collection. The diverse theoretical perspectives in this study encourage the use of multiple method approaches to gather information because it is difficult to define and limit qualitative research (J. Morse & Field, 1995). Qualitative research provides the opportunity to make sense of the participants’ reality, their social world, relationships, and interactions in combination with theoretical interpretations to further our understanding and knowledge of the research area.

In qualitative research, there are multiple avenues to explore and analyze the data, and there is no method in particular which has been championed by all researchers (Coffey & Atkinson, 1996; Ryan & Bernard, 2000). This research study provides a critical discourse analysis of both text and talk to enhance our descriptive and analytic understanding of the interpretation and actualization of education policy. Given that there were many methods used in this study, a constant comparison and synthesis of insights from reviews of literature, interpretations of curriculum texts, pedagogical practices, interviews, and focus groups were important to look for similarities and dissimilarities within the production of gender and intersections with sex. The constitutive nature of research is an important consideration throughout the analysis process. In this type of social qualitative research, there is limited separation of data collection and data analysis and, therefore, analysis should occur in the field (Gibbs, 2007).
The coding of the transcripts was done with a biopedagogical lens, informed by feminist epistemologies and physical cultural studies. The coding was systematic, meticulous, and intentional in research procedures along with continuous comparison led to the emergence of overarching themes and interrelated theoretical concepts. Hammersely and Atkinson (1995) state that while “reading documents, making field notes, or transcribing audiovisual materials, promising analytic ideas arise” (p. 191). Therefore, as repeating themes, categories or ideas emerged from the field notes, interviews, and focus groups transcripts, they became the codes used to collect the data. Hammersley and Atkinson encourage the mapping of ideas as the ideas progress and emerge to circumvent the accumulation of large data sets without regular reflection and review. As data collection occurred, I regularly used the strategy of reviewing and reflecting on the data collected to formulate any insights and inform future data collection and construction. Glaser (2001) suggests the use of open coding for all the data while in the process of data collection/construction. These open codes were associated with the experiences, behaviours, knowledge, and interactions of the young people and the adults within the school or school board environment. While collecting and coding the data, I was consciously aware of the interpretations and actualization, which may impact the participants’ social reality. Detailed coding emerged only after interview and focus group transcription was completed, because not all narratives presented in the current literature may address all the themes which surface in this study. The development of codes created an organization of ideas for easy abstraction of data for analysis (Bernard & Ryan, 2009; Strauss & Corbin, 1998).

The use of codes and discourse analysis provided an opportunity to ask questions of all the data after it was collected. Wright (2004) suggests “the notion of discourse provides a means to understand what resources are available to individuals as they make sense of the world and themselves in the world” (p. 20). Through the process of data analysis, deciding who and what gets included in the talk and text and within observations is important in this research study. Therefore, the identification of key themes was important in narrowing the scope of the participants’ reality. The codes can be understood as dominant themes, which are important in the understanding of the interpretation and actualization of the physical education policies and any variations which presented as a sex or gender difference.

As I progressed through the interviews and focus groups, six different codes developed: pedagogy, power relations, healthism, sex/gender or intersections, expectations, and
inequalities. These codes allowed me to make sense of what was happening in the school environment and provided new ideas about questions to explore with participants about nutrition, health and physical education as well as education policy. Regular comparison and review of the data and codes provided me with opportunities to (re)interpret the data and common themes. Once data collection was no longer generating new data and data saturation had occurred, data collection was complete. After the completion of data collection, more detailed codes were created: eating behaviours, nutrition knowledge, activities offered, modifications, expectations, and evaluations, to organize the data and make connections between the data created by the participants and broader social and cultural contexts. These connections were informed by the context provided through policy analysis and sociological literature.

Chapter Conclusion

Using a biopedagogical framework informed by feminist epistemologies and physical cultural studies, this chapter articulated the research methodology which was used to examine what assumptions of sex and gender mediate health and physical education policies, programs, and pedagogical practices, and what impact the intersection of sex/gender has upon students within biopedagogized physical education. Collectively through policy analysis, focus groups, and interviews with school officials, this study was designed to create “messy” texts that provide insights into the production of knowledge, its implications, along with the effectiveness of current physical education policies and the experience of young men and women. The texts created are not to be understood as the “truth” but the participants’ “truth” and experiences about health and physical education, health, subjectivity, and embodiment as situated within a time and place.
CHAPTER 4: NUTRITION POLICIES IN SCHOOLS

The Integration of Nutrition into Health and Physical Education Policy

Food choice and provision have been entangled within the school environment since the early 19th century when health officials advocated for sound nutrition practices and temperance (Gard & Pluim, 2014) and school kitchen classrooms were established for domestic sciences (Wessell, 2013). More recently, the infusion of school food programs has provided food directly to students, which subtly teaches students about the appropriateness of some foods and the dangers of others (Leahy, 2010; Leahy & Wright, 2016; Welch, McMahon, & Wright, 2012).

This chapter presents the mechanisms by which biopedagogical instructions are mediated with assumptions and interpretations of sex, gender, and their intersections within nutrition policies and programs in Ontario schools. Specifically, this chapter explicates the inter- and intrasubjective implications that were assigned to the purchasing of food, internalizing of nutrition knowledge, and the establishment of eating practices within the school environment. Young men and women (re)produce sex and gender binaries while establishing nutrition knowledge and engaging in eating practices. The development of knowledge and establishment of eating practices stem from deeply held beliefs about sex and gender located within the school and social environment.

Focus groups with students, as well as interviews with school staff, are used to unearth the meanings attributed to nutrition as well as the engagement with school nutrition policies and programs. To contextualize the study findings and the theoretical naissance of biopedagogy in combination with sex, gender, and their intersections, the chapter commences with an introduction of the policies and programs implemented within Ontario schools. The remainder of the chapter outlines discussions about knowledge surrounding nutrient requirements, financial considerations for food requirements, and concludes with discussion surrounding concerns over social image.

Although the findings are integrated with the analysis and presented in six subsections, they should be interpreted as concatenated sections that underscore the intricate relationship that is currently in place between the practices and policy within the physical culture of the school environment. Furthermore, the subsections fit into the broader context of health and physical
education policies and the mechanisms in which sex, gender, and their intersections are (re)produced.

**Shifting Policies and Programs**

In Western society, school-based health policy has moved towards regimes of surveillance and accountability (J. Evans et al., 2008; Rich & Perhamus, 2010). Obesity discourses are being used along with other health “risks” as a basis for nutritional-based pedagogies of food within schools and popular culture (Welch et al., 2012). Albon and Mukherji (2008) describe five historical periods of food policy in Western culture, starting with a philanthropic concern (pre-1906) and transitioning to the most recent period of safeguarding the futures (1997 onwards). The most recent period focuses on the nutritional content and value of food rather than the past concerns over availability and sanitation. Food is now considered vital in disease prevention and the cause of ill health. Pedagogical instructions have turned “eating into medicine and its effects into a health crisis” (Berlant, 2011, p. 102). In turn, food is increasingly regarded as contributory or inhibitory for the preservation of a child’s future (Albon & Mukherji, 2008). Pedagogies develop from a specific goal or purpose (Dean, 2010). Ellsworth (2004) understands these purposes to be “pedagogy’s force” which is woven into the pedagogies and the force behind them.

Both directly and indirectly, nutrition policies shape the biopedagogical messages the students receive, respond to, and reproduce in eating behaviours, which are embodied by sex, gender and their intersections. Within Ontario schools, nutrition is delivered as curriculum, which outlines the knowledge and skills students are taught, or implemented as legislated policy, which outlines rules or procedures schools must follow within the school environment. These policies are grounded in the discourses about the use of nutrition to preserve the children’s future.

In 2008, the Liberal government of Ontario passed legislation to amend the *Education Act* to give the Minister of Education the “power to establish policies with respect to nutrition standards for food and beverages provided on school premises” (Lysyk, 2013, p. 104). The legislation to increase the Minister of Education’s power was deemed justified and necessary by the former Minister of Education, Kathleen Wynne, as a result of a 2004 report by Statistics Canada. The report stated nearly a third of children and adolescents were overweight or obese. Kathleen Wynne stated,
the level of obesity among young Canadian children has nearly tripled over the last 25 years. In 2004, a study released by Statistics Canada showed that nearly one third of children and teenagers in Canada are either overweight or obese....The well-being of our young people is at stake in this. It is the right thing to do. We know that we have broad support across the education system to do this” (Legisative Assembly of Ontario, 2008).

Further research about limited fruits and vegetables consumption intake by adolescents (Garriguet, 2004), a position statement by the Ontario Medical Association (2005), and research supporting students choosing healthy lunch purchases (Wagner, Senauer, & Ford Runge, 2007) was cited by Minister Wynne as further support of her legislation. The legislation Healthy Food for Healthy Schools Act (2008) was passed because of concern about the present and future health of Ontario’s youth: The need to develop a healthy school environment was depicted as urgent. Young people were “at risk,” and the government was considered to have an obligation to intervene in order to safeguard the health and lives of Ontario students.

An outcome from the Healthy Food for Healthy Schools Act (2008), the policy, PPM150 School Food and Beverage Policy (2010), was introduced by the Ontario government in January 2010 and was put into effect in all Ontario elementary and secondary schools by September 1, 2011. PPM150 outlines the nutrition standards that are required for food and beverages sold within schools (Government of Ontario, 2008; Ministry of Education, 2010b).

Nutritionists and health organizations, such as Dietitians of Canada and Ontario Society of Nutrition Professionals in Public Health, praised the policy because it was thought to assist students in making healthier choices and getting them to eat healthier food. Kathy Page, a registered dietitian declared, “the School and Food Beverage Policy is a positive step toward creating healthy school environments and improving the nutritional health of Ontario students” (Ontario Ministry of Education, 2010). Linda Dietrich, a director at Dietitians of Canada, stated, implementation of nutrition standards for schools as a valuable contribution to the health and well-being of Ontario students. Healthy food choices available at schools that reinforce a healthy eating classroom education is a significant achievement that has the potential to have a broader influence in achieving a healthier population. (Ontario Ministry of Education, 2010)

The Ministry of Education expects the policy to improve the overall nutritional quality of the food and beverages available for purchase in Ontario schools. In turn, the policy is expected to contribute to the Ministry of Education’s efforts to encourage healthier food choices and improve
eating behaviours. Its implementation is also considered a complement to the curriculum taught in health and physical education classes (Lysyk, 2013).

The *School Food and Beverage Policy* (2010) establishes arbitrary nutrient levels and requires 80% of the products sold in the cafeteria and vending machines to contain higher levels of essential nutrients and lower levels of sugar, fat, and sodium. Twenty percent of the products sold within the school are allowed to have higher amounts of sugar, fat, and sodium. Products that contain few or no essential nutrients and higher amounts of sugar, fat, and sodium are prohibited from being sold in schools. For example, baked goods with less than 5 grams of fat, less than 2 grams of saturated fat, and more than 2 grams of fibre would qualify as a “sell more” or 80% of items sold in the cafeteria. A baked goods item that has less than 10 grams of fat, less than 2 grams of saturated fat, and more than 2 grams of fibre would qualify as a “sell less” item or 20% of the items sold. All other baked goods items that do not fall within these guidelines would not be permitted for sale. A school principal or school boards are given 10 designated exemption days in which there are no restrictions in the food or beverages allowed for purchase within the schools. Schools and school boards must also comply with other nutrition policies or regulations such as the *Trans Fat Regulation*, which bans the selling of food or beverages that contain trans fat (Ministry of Education, 2008). Although not explicitly stated, the policy attempts to regulate the types of foods that young men and women consume in the school environment as an attempt to instil healthy eating habits and create healthy biocitizens. These aspirations are commonplace as a function of government projects to target food and morality in Western society (Coveney, 2006). The regulation of foods has different implications for males and females because of competing social pressures and biological assumptions that will be discussed in later sections.

The government’s decision that young people require policies in order to acquire certain eating practices promotes the custom of placing blame on individuals. Imparting the eating behaviours of the government during the schooling process places the onus on young people to monitor and regulate their bodies in the future and enlist as virtuous and contributing citizens without consideration of sociocultural influences which contribute to variation of eating practices.

The nutrition policies within schools have reduced food to its individual components which serve a particular bodily purpose. Foods permitted within the school environment must not
exceed these predetermined component limits as outlined by the government’s policy. Over the last century, nutrition has transformed into a science and has been taken up as a means to prevent illness in everyday life (R. Apple, 1996; Chamberlain, 2004). Scientifically ascribing health and risk to food has created discourses which increasingly medicalize food (Welch et al., 2012). Medicalization (Illich, 1974; Zola, 1972) occurs within the media, education, and medical institutions (Jutel, 2006; Zwier, 2009) whereby “non medical problems become defined and treated as medical problems usually in terms of illness or disorders” (Conrad, 1992, p. 209). Thus a shift has occurred from harnessing the external outside world to the increased control over internal nature and biological processes (Clarke, 1995). Through the medicalization, food is reduced to its nutrients and the health risks or benefits the food provides (Scrinis, 2008). The merging of science, nutrition, and medicine constructs “truths” in public discourse which are challenging to dispute (Welch et al., 2012). It has also provided a method for governments in the regulation and surveillance of food while also providing instructions for citizens to follow (Chamberlain, 2004). The use of food labels or mandatory nutrition labelling is an example of a biopedagogy tool used by governments. The School Food and Beverage Policy (2010) is a more restrictive form because of its medicalization of food and restriction of food items based on the food’s nutrients or lack thereof. Certain foods in the policy are allowed because their nutrients are considered to provide health benefits and do not contribute to health “risks.” A “powerful binary opposition which is often invoked in popular and medical discourses relating to food is that between “good” and “bad” food” (Lupton, 1996, p. 27). Fruits and vegetables are permitted for their fibre, vitamins, and minerals which may protect against cardiovascular disease; fried foods are banned because of their potential contribution (Djouss, Petrone, & Gaziano, 2015; Hung et al., 2004).

The current regulation of food within Ontario schools wields disciplinary power by removing the choice of unhealthy foods. Children are “at risk” of making “unhealthy” choices, and the practice of banning foods serves to normalize and regulate young people’s eating behaviours. This strategy is an act of biopower because it is an intervention for the collective existence to protect the life and health of the children within the schools (Rabinow & Rose, 2006). Medico-scientific truths about different foods are projected through the types of foods available within the schools. This in turn works to constitute and regulate the understanding about “risk” and “mortality” (Welch et al., 2012). School nutrition policies discursively subject
the students to be attentive to their own health and bodies through monitoring and regulating their consumption of food and drinks (Welch et al., 2012). The disciplinary power employed by the School Food and Beverage Policy (2010) is framed as assisting young people in making healthy choices but removes cultural practises and choice from them instead.

**Perceived Nutrient Requirements**

Since 1938, Health Canada has been reviewing nutrition research to determine the nutrient requirements to maintain health. The United States and Canadian governments have been working together since 1995 to determine dietary reference intakes (DRIs) (Health Canada, 2010). The DRIs offer ranges of nutrient intakes to maintain health and prevent chronic disease. Some DRIs are based on an individual’s age, sex, and physical size (Otten, Hellwig, & Meyers, 2006). Determining DRIs and concern about nutritional value of food is regarded as instrumental for safeguarding the future of young people (Albon & Mukherji, 2008). Breaking down the nutrients into individual requirements and creating pedagogies surrounding intake encourages individuals to self-monitor and self-regulate to ensure they are meeting their needs and preventing ill health.

The Institute of Medicine (2006) recommends an individual’s protein intake should be 10–35% of their daily caloric intake. While the United States Department of Health and Human Services (2002) recommends a protein intake of 0.85g for every kilogram, a young person (between the ages of 14 and 18 years) weighs. Butte, Hopkinson, Wong, Smith, and Ellis (2000) found that protein requirements varied little with age and sex; rather the requirements are dependent on a person’s physical size. Furthermore, most individuals adequately consume or exceed their daily protein requirements; an increased consumption for those participating in sports is not required (Phillips, 2004). In a joint statement, the American College of Sports Medicine, American Dietetic Association, and Dietitians of Canada suggest that “data are not presently available, however, to suggest that athletes need a diet substantially different from that recommended in the Dietary Guidelines for Americans or the Nutrition Recommendations for Canadians” (American College of Sports Medicine, American Dietetic Association, & Dietitians of Canada, 2000, p. 2130). Most young people would meet their protein requirements without any extra effort.

Despite these positions and recommendations, young men receive media messages that they require more protein than young women due to their differences in physical size and amount
of muscle mass (Field et al., 2005). The assumption that an individual’s sex rather than their physical size requires a higher protein consumption permeated discussions within the student focus groups and interviews with school staff about eating behaviours. Teaching staff and students comment on the large number of young men who had large containers of protein powder in their lockers to make protein shakes during the school day, while the cafeteria staff comment about the young men’s food choices being higher in protein.

*Question:* Are there differences in the types of foods that young men and women eat?

*Brittany:* Guys naturally have more muscle so they need to eat more protein.

*Audrey:* Guys keep those massive things of protein powder in their locker to build muscle. They bring those protein shakes to class with them multiple times a day.

*Brian:* There's like guys that go to the gym a lot too and will have protein shakes after and will want me to join them.

*Heather (teacher):* The boys are more likely than girls to drink protein shakes. They carry them around the school.

*Question:* Are there any types of food that young men are more likely to purchase in the cafeteria than young women?

*Cafeteria employee:* Boys are more likely to go for high carb and high protein foods than girls. For example: mashed potato bowl with chicken or pulled pork on a panini.

The biological assumption that all young men need more protein than young women without consideration of context such as body size or muscle mass has resonating impact on the behaviours of the young men within the school. The school cultural eating behaviours of the young men appear to reflect deeply held truths that their diet should contain a large amount of protein to meet their biological needs as young men and to support their muscle mass regardless of their own physical size. This biological assumption is entangled with the young men’s social behaviours. Within the school, the primary consumers of the protein shakes are young men involved in athletics. It creates a culture in which a student’s social status is associated with consuming protein shakes as part of a social event after a workout and contributes to a student’s social capital when he brings a protein shake to class.

Young men are also assumed by society to require more protein because of their physical activities choices (Buckworth, 2004). Young men are considered more likely to participate in
strength-based and vigorous activities and, as a result, thought to require more protein (Buckworth, 2004). The assumption of a differing biological requirement for young men than young women has an impact on the behaviour of the young men. The young women in the focus groups spoke about having a protein shake as part of an easy snack or breakfast. This counters the conversations of the young men, who suggest they consume protein shakes or protein bars as a necessity after a workout to assist in building muscle.

**Question:** Why do young men drink protein shakes or prefer those types of foods?

**Ryan:** I usually have a protein shake after a workout. It helps my muscles.

In the focus groups, young men spoke about consuming information about their protein requirements through advertisements and reading articles from the Internet and health magazines. The websites and magazines are a mode of “public pedagogy” (Giroux, 2004b; Rich, 2011) which instruct and (re)produce knowledge about normative relationships between young people, their bodies, and food (Wright & Halse, 2014). These sources of information serve as pedagogy for how young men think about their bodies and food and serve as evaluation criteria to establish identities with respect to social norms and construct a “version of reality” (Kenway & Bullen, 2001, p. 169). The information the young men consume from the Internet or magazines becomes their “truths” and they were hesitant or reluctant to believe contradictory evidence presented to them in the focus group discussion. The consumption of protein by the young men reinforces the masculine identity which is normalized through the magazines or websites.

These “truths” may also be an epistemic consequence of Hollywood and history. Ancient Roman gladiators are associated with strength, power, and endurance. Representations of gladiators in statues, paintings, and Hollywood movies are of astonishing, herculean fighters (Longo, Spiezia, Maffulli, & Denaro, 2008). Early body builders such as Charles Atlas, Bernarr McFadden, or Eugen Sandow used Ancient Roman and Greek imagery to project narrow images of the body (Bakewell, 1997; Reich, 2010; Waugh, 1992). Gladiators were thought to consume a high protein diet to develop and maintain their large muscle mass (Longo et al., 2008). Depictions in Hollywood movies conjoin the muscular images of gladiators with consumption of large quantities of meat. It was not until recently that it was discovered that gladiators’ diets were primarily grain based and mostly meat free (Lösch, Moghaddam, Grossschmidt, Risser, & Kanz,
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2014). Despite the recent revelations, these historical misunderstandings and Hollywood representations may contribute to the epistemology of some of the students’ truths surrounding protein requirements.

Foods containing protein have been medicalized and reduced down to a necessity that young men must consume as a means to develop a muscular body. Advertisements and articles in men’s magazines and online take on the role of instruction manual by providing information about what men should eat to “bulk up” (Parasecoli, 2005). The discourses and governing pedagogies the students are exposed to through the Internet, health magazines, and Hollywood have contributed to the truths that young men need to consume large amounts of meat and protein for their biological needs when in fact it may be a result of social needs or status (Stibbe, 2004). Most students within the focus groups suggest biological differences in the protein requirement for young men exist, which in turn impacted their social behaviours such as choosing to carry protein shakes to class. The considerations made for eating behaviours to accommodate for their biology intersects with the desire to assimilate to cultural understandings and eating practices of the young men.

Although a female athlete may benefit from the consumption of protein, the requirement to consume large quantities of protein is not considered a necessity for the young women within the focus groups because the protein was not required or desired to build muscle mass.

*Question:* Why don’t young women drink protein shakes?

*Vicki:* We don’t need it to build muscle or anything.

*Question:* Do you exercise to build muscle or become stronger?

*Vicki:* Guys are suppose to be the ones that are like stronger and whatever but then like but girls are suppose to be like feminine and not have like giant biceps.

*Cynthia:* If I had like big arms I just wouldn’t want them to be bigger than some guys because that brings in a whole new reason for them to make fun of you for something and now you look like one of them but you can’t act like one of them and it’s just then they’ll come up with something else.

*Adam:* When you go in the weight room the guys are lifting weights and the girls are always on the cardio machines.
Sue: ‘Cause we’re not expected to. In fitness class like we automatically have like heavier weights for the guys than the girls, which is like understandable but I, mean yeah we could do more.

Unlike the young men, the young women do not engage in the behaviour of consuming large quantities of protein because they do not feel it was needed to support their physical stature or physical activity needs. The young women’s primary form of exercise was described as cardiovascular for slimming their body mass rather than lifting weights to build muscle mass. Therefore, the young women do not consider the consumption of large amounts of protein a nutritional requirement. This is reflective of the effects of public pedagogy on young women’s versions of reality, which are counter to young men’s. The requirement of protein consumption is featured less in women’s magazines than men’s magazines (Ellison, White, & McElhone, 2011). In women’s magazines the focus of protein consumption is for dieting, whereas in men’s magazines, protein consumption is featured for muscle gain (Cook, Russell, & Barker, 2014; Stibbe, 2004). The magazines do not exist as a competing pedagogy; rather they reinforce the dominant messages about young women’s lower protein requirement. Recently, celebrity trainer Jillian Michaels and the “fitspiration” movement promotes the use of protein by women for weight loss (Carrotte, Prichard, & Lim, 2017; Hutson, 2013; Michaels, 2013; Michaels & van Aalst, 2009). However, this message may not be incorporated into the consumption of public pedagogy for the young women in this study. Their comments in the focus groups do not reflect this messaging being integrated into their repertoire of eating practices or understanding of their biological needs.

For young women, the medicalization of food has impacted the types of foods young women will eat, particularly in a social setting. In public spaces, such as in restaurants or school, the young women speak of purchasing salads, fruit, or “healthy” foods and avoiding foods such as fried food, meats, or “unhealthy” foods. The young women and cafeteria staff describe differences in their cafeteria purchases and experiences:

Question: Describe your experience in the school cafeteria. What do you buy?

Jenny: I tend to buy healthy like the fruit salad or one of the other salads, the guys won’t eat that.

Sandy: When I’m at school, I try to eat healthy because I don’t want people to judge me.
Jessica: Ya, when a girl eats chips or fatty foods around people like the public and she eats it all gentle and will eat like one or two bites and then when she is by herself she’s like inhaling all of them.

Question: Are there any types of food that young women are more likely to purchase than young men?

Mary (cafeteria employee): Girls purchased more of the cold express items like salad, simple sandwiches, fruit.

Through a medicalization lens, the young women break foods down into a binary of healthy/good and unhealthy/bad foods based on common nutrient reference points. This may be the product of health and physical education lessons in elementary school, which focus on Canada’s Food Guide (Ministry of Education and Training, 1998). Canada’s Food Guide acts as a disciplinary tool which assists individuals in monitoring and regulating which foods are considered appropriate to establish and maintain health. Previous research has demonstrated this practice of placing foods into binary categories is commonplace (Chapman & Maclean, 1993; Charles & Kerr, 1990; Lupton, 1996; Murcott, 1993; Santich, 1994). Determining what constitutes a healthy food can be influenced by social relationships, and social identities (Lindsay, 2010). The consumption of “bad” foods by the young women is limited in public spaces for fear of judgement by others. Although the young men in the focus groups speak of wanting to increase their protein nutrient consumption in social spaces, the young women limit their overall nutrient consumption.

In the current climate of modernity and neoliberal politics, it is up to the individuals to participate in social actions which bring them good health (Lupton, 1995; Massumi, 1992). In social settings with their peers, young people have a “participatory imperative” (Petersen & Lupton, 1996, p. 147) to create and reproduce healthy spaces which encourage one another to engage in behaviours desirable for broader public health. The young men and women both gather and disseminate instructions about themselves and others’ behaviours within the culture of healthism (Crawford, 1980). This “healthification of space” (Fusco, 2006) reproduces messages to young people about their consumption of food.

When the young people have difficulty determining what types of foods are “healthy,” they often look for information within their environment, turn to their friends, or search the Internet for guidance. The school’s cafeteria did not provide posters explaining the school nutrition
policy or food choices. Having nutritional information available to students would assist them in making food choices without binary associations. If students would like to know more about nutrition, they would need to look up the information by asking for the policy from the main office or downloading it off the Internet. The information available online or by asking friends may reinforce binary associations with foods and appropriateness of food for young men and women.

Question: What makes a food healthy or unhealthy?

*Cynthia*: I don’t know, like how much fat or carbs something has.

*Alison*: Ya, you don’t want to eat too much fat.

Question: Where do you get the information?

*Audrey*: I educate myself about it [nutrition] ‘cause I do research on the Internet.

*Alison*: I sometimes will ask my friends or buy what they buy.

*Samantha*: I have some friends who are trying to eat healthy or are on a diet so will buy something or not buy something and I will do the same.

Question: Did you know when you cut out a type of food such as meat or vegetables, and you don’t adequately find a replacement for those missing nutrients such as iron, vitamin B12 or fibre, your body could become deficient and this may have health impacts?

*Alison*: It would be nice to know what this vitamin does or that one does or why it is important. We just talk about stuff like carbs, protein and fat. I might take it [learning nutrition] a bit more seriously then.

*Samantha*: I didn’t know that, it wasn’t explained to me and I didn’t really think about it.

Question: Is there anything the schools can do to help you learn the information?

*Samantha*: I just think that we could focus a little bit more on like what are some healthy things to eat and stuff like that and also that it’s different for everybody like not everybody should have this amount per day of a certain things and stuff like that.

*Audrey*: I feel we could spend more time on nutrition 'cause like Grade 6 to 9 it's all the sexual stuff and like we do that every year and it's all the same thing but like the first time that we did nutrition was in Grade 10 but we only did it for like three weeks, like three health classes, and now we have that for like six weeks or something. So instead of doing it like that you could like divide it to have more nutrition and like learning new things as opposed to what you already know.
Although the young women categorize foods in terms of “healthy/unhealthy,” the young women do not have a clear understanding as to why they categorize foods in a particular manner or what nutrients are important. Their space has been sanitized of any unhealthy foods without providing the young people with an explanation as to why their environment is devoid of certain foods. It amplifies ideas that young people are at risk and unable to make their own choices, which requires policies to create an environment which does not require critical thinking when selecting foods. Consequently, the young women do not fully understand implications of removing particular foods from one’s diet to satisfy a fad diet requirement or social pressure.

Additionally, the young women are unaware that avoiding particular types of food such as red meat could impact the types of nutrients they are receiving. Red meat is a source of vitamin B12, which is entirely absent from vegetable products (P. Williams, 2007). Without knowledge about other sources of vitamin B12, the young women may have insufficient levels of B12, a vitamin important in the production of red blood cells, immunity, and maintenance of the central nervous system (Ehrlich, 2011). The young women suggest they often talk about dieting and fad diets, such as cutting out certain foods to reduce calories. By cutting out specific foods as a method to reduce caloric intake, the young women may be reducing their nutrient intake, which may impact the degree to which they receive required nutrients for optimal growth and development (Storey et al., 2009; Tupe & Chiplonkar, 2010). Furthermore, the reduction of fat in foods may reinforce ideas to young women that food containing fat is unhealthy and needs to be eliminated from their diet. This gendered practice of reducing calorie consumption intersects with biological impacts of reduced cell reactions from nutrient deficiencies.

Many of the young women express frustration when they are told about potential health impacts from eliminating foods from their diets and are unaware of the intricacies of nutrition. The young women turn to their friends, the Internet, or magazines to determine whether or not a food is deemed “healthy.” Young people are not taught critical media literacy in health and physical education classes, which can be problematic when obtaining nutrition information from the Internet. In Ontario, media literacy falls within the teachings of the mandatory English courses (Ministry of Education, 2007a, 2007b). English teachers without a health and physical education knowledge base may not make connections to critical media literacy and health or may not feel confident engaging in those discussions with students, therefore omitting them from their lessons.
Sources of health information on the Internet may be difficult for students to evaluate the scientific quality of the data on their own, or the information is not designed for an adolescent audience (Benigeri & Pluye, 2003; Shepperd, Charnock, & Gann, 1999). Furthermore, the increase in advergames geared at children and adolescents blurs the line between nutritional information and brand loyalty (Culp, Bell, & Cassady, 2010; Thomson, 2011). Companies create associations between fun and healthy information. Without the skills or knowledge to evaluate the information presented before them, students may not gain the beneficial health knowledge they require or be able to decipher valuable information from harmful. Without the knowledge about the impact of their behaviours on long-term health, or skills to evaluate new knowledge, young people may engage in undesirable health behaviours.

The previous health and physical education curriculum in Ontario schools neither incorporated criteria literacy, nor did it address biological assumptions and their impacts on social behaviours. The Grade 10 health and physical education curriculum in the 1990s required students to “explain the risks of dieting and other unhealthy eating behaviours for controlling weight” (Ministry of Education, 1999a, p. 15) in class discussions or through evaluations such as tests or assignments; there are no clear expectations to learn about assumed differences between young men and women and how it may impact their social behaviours.

The medicalization of food and its reduction to nutrients has created “truths” surrounding biological requirements for young men and young women. In this study, the young men assume their sex requires them to consume a higher amount of protein, which in turn provides them with opportunities to reaffirm their masculinity by carrying protein shakes throughout the school. Conversely, the young women’s version of reality is to eliminate nutrients by classifying foods as healthy/weight reducing or unhealthy/fattening. These actions support the social norms of femininity and the “cult of slenderness” (Tinning, 1985) by limiting consumption, thus maintaining or achieving the ideal trim, toned body (Wright & Dean, 2007). It is difficult to disentangle whether the social behaviours related to food choices or restricted consumption are influencing the biological behaviours or vice versa. Without students reflecting on biological assumptions they harbour about nutrient requirements, they may have an increased tendency to engage in gendered nutrition practices. Limited media literacy and nutrition literacy skills also make the students unable to think critically about their behaviours, which will allow social influences to flourish and go unchecked.
Financial Considerations

The implementation of the *School Food and Beverage Policy* (2010) has decreased cafeteria sales as a result of students fleeing school cafeterias to purchase at outside food establishments (Infantry, 2012; Rushowy, 2012). An investigation by the Ontario Auditor General concluded that since the implementation of the policy, schools have experienced 25% to 45% loss in cafeteria sales and 70% to 85% loss in revenue from the vending machines (Lysyk, 2013). In 2012, these losses in revenue were estimated to be $95,000 for the Greater Essex County District School Board, $900,000 for the Ottawa-Carleton School Board, and $1.2 million for the Toronto District School Board (Kretzel, 2012). The school administration and teachers within this study acknowledge the number of students who leave school to eat at the fast food establishments which are located in a plaza next to the school. Staff members note these observations:

*Lauren:* I don’t seem to see a lot of kids eating lunch here and buying food in the cafeteria.

*Nathan:* Students flock to the plaza in droves, which causes them to be late coming back to class.

The secondary school administrators and public health units interviewed for the Ontario Auditor General’s investigation concerning the effectiveness of this policy also shared this point of view (Lysyk, 2013).

With the current requirements about the types of food and beverages available for purchase, school cafeterias are unable to meet the nutrition requirements for an affordable price and quantity that is attractive to students. The government’s medicalization and categorization of food limits the selection of foods that cafeterias can offer. Since implementing the new nutrition policy, the availability of low cost, low nutrient foods such as French fries or potato chips has been replaced with higher nutrient or “healthier” foods such as fruit salads and baked potato chips, but these foods are more expensive for students. The medicalization of the cafeteria food to meet government-imposed limits requires the cafeteria to use more expensive ingredients or purchase more expensive foods. For example, instead of white flour, the cafeteria is now required to purchase whole wheat flour, more expensive flour, for their baking products.

The teachers and cafeteria staff recognize the students’ desire to leave the school setting to find less expensive options.
Question: How has the price of food or types of available foods changed as a result of the implementation of the PPM150?

Cafeteria employee: The changes were largely due to menu mix shifts and reliance on higher cost ingredients, which also drives consumer pricing up.

Question: Why do so many students leave school to buy their lunch?

Mike: The food here, for what they can get over at the plaza, dwarfs what they can get here in terms of volume of food for the same price.

The cost of the food in the cafeteria was a common complaint among the students in the focus groups. The implementation of the policy resulted in healthier foods within the school environment, but these foods come at a higher cost to students. Some students now struggle to purchase foods at the cafeteria within their financial means.

Question: Has the new nutrition policy changed what you purchase at the school cafeteria?

Sam: I liked their fruit salads and I used to get them a lot but now they’re like $6.00.

Heather: If you go to Tim’s [Tim Hortons] you can get something so much cheaper for like here. Like you can get a box of pizza for like the same price almost as like getting a slice here.

Robert: It honestly is cheaper to go somewhere else. It’s cheaper and better so it’s like what’s the point of staying here.

Evan: Rib on a bun used to be like a foot. Now it’s down to like five and a half inches and it’s gone up like a dollar and a half and you’re like I can’t afford this.

It is evident in the students’ comments that the shopping plaza next to the school offer more affordable options. In an effort to conform to the nutrition standards outlined in the School Food and Beverage Policy (2010), the types of food offered as well as the portions of food have changed. A decrease in portion size was met with an increase in food price. Although the food within the cafeteria may be a more nutritious choice for the students, the price of the food is a higher priority, which results in the students choosing to go off campus where a higher quantity of food can be purchased at a lower price.

The decrease in portion size accompanied with an increase in cost is considerably more impactful on the young men than the young women in the focus groups. The young men speak of consuming more food than young women because they were more active and have a better
metabolism, whereas the young women are not considered to be in need of a large quantity of food because of their smaller physical size.

Question: Does someone or something impact your food choices?

Adam: I have definitely changed the way I eat. I need energy for like sports outside I’m always so busy… I will go home sometimes and eat like 12 eggs. It’s too expensive to do it here. I need the energy for my exercise.

Ann: Their [young men] metabolism isn’t the same as ours [young women]. So they eat a whole pizza and you’re eating too, you know it’s a lot for you but for them, they don’t think anything of it.

Robert: Girls tend to be smaller and, smaller in figure, so I have read that their food intake and calorie intake needs to be lower. Guys are naturally bigger so they need to eat more.

Andrew: On my baseball team we have like strict diets we’re suppose to follow. Like I’m a toothpick so I have to eat as much as possible, like anything to gain weight, and work out a bunch to gain muscle.

The young people in the focus groups describe a general biological assumption that all young men need to consume more calories than young women because of young men’s physical size and energy output. However, an individual’s daily caloric intake is dependent on an individual’s given weight, height, age, and sex as well as his or her level of daily physical activity (US Department of Health and Human Services, 2002). Some young men require a higher caloric intake than young women because of a higher activity level or larger size and muscle mass, but this may not be true for all young men or women. This biological assumption is influenced by dominant cultural messages that a hearty appetite and large physical size are a desirable trait in young men but not in young women (Kilbourne, 2003).

When eating in front of others, the young men describe consuming large quantities of food and bragging about the amount of food they consume, which may be an effort to reaffirm their gender role and masculinity. Cavazza, Guidetti and Butera (2015) found the types of foods and the amount of food consumed are associated with gender norms and when disentangled, these variables still independently contributed to gender. The young men’s lack of concern about the restriction of their eating behaviours is contradictory of obesity discourses which encourage restraint in calorie consumption. The defiance of such discourse is not met by any resistance by the young men because there are no moral repercussions for their failings as biocitizens to limit their caloric intake. Rather, these behaviours are embraced and encouraged.
**Question:** What do you mean when you say you are eating like “one of the guys”?

**Brian:** Like Matt will come back on Friday after lunch and say like I just ate “x” number of hotdogs with “x” numbers of guys and it was two bucks.

**Matt:** I feel like with guys, maybe this is just like a football team thing but Chris was just like I had two burritos yesterday. Like that sounds like that’s an accomplishment. I was proud of him.

**Andrew:** There are times we’ll chirp each other for not finishing our food.

Within the focus groups, the young men explain that consuming large quantities of food is assumed to be a natural part of being male and a necessary part of being “one of the guys.” Eating as much food for as cheap as possible is a desired and reinforced behaviour to reaffirm the young men’s masculinity. With the implementation of the *School Food and Beverage Policy* (2010), it is a financial strain for many of the young men, who express concerns about the financial cost of food in the cafeteria because the gender imperative to consume large quantities of food becomes too expensive. However, for young women, the gender imperative encourages restriction of food quantity so they are not as bothered by the more expensive price. To engage in these “masculine” behaviours, young men often leave the school environment to seek another food establishment which provides large quantities of food at a low price. Although it may not be biologically necessary for young men to consume large amount of foods, it is a “truth” that is reaffirmed in social relationships. The school cafeteria does not provide affordable opportunities for some young men, who go elsewhere. This results in a cafeteria that becomes gendered female while “masculine males” access food options elsewhere. Furthermore, the health and physical education curriculum does not contain any specific expectations for the teachers to teach students about financial considerations such as how cost or accessibility to food can impact choice and nutritional value. Young men are left without the knowledge or skills to deal with social pressure to engage in masculine behaviours while also making nutritious choices on a limited budget.

**Concerns Over Social Image and Influence of Peers**

During adolescence, young men and women spend an increased amount of time with their peers and, more than at any other life stage, there is an increased pressure to be accepted by their peers (Coleman, 1980). Studies have shown that peers influence adolescent food choices in terms of both quality (Bauer, Larson, Nelson, Story, & Neumark-Sztainer, 2009; Cooke & Wardle,
2005; Hill et al., 2008) and quantity (Wouters, Larsen, Kremers, Dagnelie, & Greenen, 2010). Young men and women may be unaware of the influence of others on their attitudes and behaviours (Cotterell, 2007). In interviews with young people, Carter, Bennetts, and Carter (2003) found the respondents did not consider themselves to be influenced by others.

However, when explaining the behaviours of their peers, the young men and women use peer influence to explain other young people’s behaviours. For the young women in the focus groups, discussions about their social concerns are centered on limiting consumption. Within a school, adolescents may create an appearance culture that is governed by the norms and expectations modelled and reinforced by the adolescents within the school (Jones & Crawford, 2006). The foods young men and women eat, the size of their bodies, the manner in which they eat, and their appearance can be observed by others and used to evaluate an individual’s worth and whether or not he or she fits in (Eder, Evans, & Parker, 1995; Jones, 2001; Mueller, Pearson, Muller, Frank, & Turner, 2010; Pilner & Chaiken, 1990). Body weight and appearance have been shown to contribute to social status in adolescence (Crosnoe, Frank, & Strassmann, 2008; Paxton, Schutz, Wertheim, & Muir, 1999). The behaviours of a young man or woman may be indicative of what an individual feels is needed to fit in or deemed appropriate for his or her gender. Young men and women may consume certain types of foods, based on biological assumptions which uphold their social image and personal identity (Bobcock, 1993; Kacen, 2000). For example, young men may avoid eating salads to avert teasing from their peers or losing social capital.

The biological assumption that all young women need to consume fewer calories influences the young women’s behaviours when eating in the presence of others. M. Young et al. (2009) found females consumed foods which were lower in calories in the presence of males, and the females’ reduction of calories was a function of the number of male peers present. The researchers did not observe the same phenomenon with males. In the student focus groups, the young women address the presence of young men and women and the influence on eating behaviours. The young women state they consume less food in front of young men because the young women feel food restriction is an expected behaviour since they do not need to consume as many calories as young men because they are biologically smaller.

**Question:** Is there anything different about how young women and young men eat?
Katrina: A guy can be less conscious about what he eats. Like if he’s trying to eat right like he’ll still eat a lot because he can eat a lot and it won’t affect him but I think girls are a lot more cautious about what they eat. They [young women] don’t need as much.

Jenn: A lot of guys can eat so much and be so skinny and there’s like girls that can eat so little and not be skinny.

Question: Do you eat differently when you are around young men or young women?

Jenn: I eat more politely, like I eat less of it and not like a slob so they [young men] don’t judge me.

Katrina: When I’m with other girls, I’m less restrained on how much I eat and what types of food I eat

Alison: There’s like certain friends that like judge you so harsh and then there’s some just like okay whatever.

Jenn: We’ll like go to Marylou’s and we’ll buy a thing of cupcakes and eat them all… or we plan like a group hangout for all the girls and everyone brings like two bags of chips or like cookies and all these different types of candy.

It was understood by the focus group participants that in order to retain a smaller figure, young women should not consume as many calories as young men. When eating in front of young men, the young women are consciously aware of the evaluative gaze of their peers and are concerned with judgements from young men if the young women were to consume large amount of foods. Eating becomes a private or secretive activity for young women to avoid the evaluative gaze of others, especially when foods choices would not be considered healthy.

Adolescents risk the judgement of their peers from consumption of “junk” or “fast” food (Bugge, 2011; McPhail, Chapman, & Beagan, 2011; Willis, Backett-Milburn, Lawton, & Roberts, 2009). The young women in this study also comment on the influence of other young women on their food selections. The young people are breaking moral imperatives as biocitizens by consuming unhealthy foods and risk social consequences for their lack of regulation and discipline over their food choices. When eating with other young women, the young women in the focus group suggest they are less restrictive in the types and amount of food the young women will consume because they do not risk losing as much social capital for breaking moral imperatives. However, the amount of restraint the young women exercise over their eating habits is dependent on the self-determined degree of friendship. When young women are with their
girlfriends determined to be close, the focus group participants speak about being more comfortable in eating whatever they want because it is considered acceptable for the young women to consume large amounts of “junk” food among friends. When in the presence of strangers or unfamiliar peers, the young women suggest they feel judged and try to negotiate their place within the school and social environment. The young women are aware of the evaluative gaze of their peers, which influences their eating behaviours and food selections, whereas when surrounded by their close girlfriends, the young women may not feel judged by their actions or worried about social consequences from their “moral indiscretion” because they already know their position within their peer group. Understanding that young women are influenced by others’ food choices, the cafeteria needs to make sure they have the adequate number of healthy foods available for purchase. Young women suggest the cafeteria often runs out of items such as the fruit or salads.

*Question:* Why don’t you purchase food at the cafeteria?

*Melissa:* They run out of the good stuff so fast. Like they don’t have a lot of it.

*Question:* What is the “good” stuff?

*Melissa:* Healthy stuff. Like salads and fruits. The salads aren’t healthy in the caf. They are pasta salads with creamy sauce. It would be better with more fresh stuff.

*Rachel:* At the school like we should have more stuff, I think more options ‘cause that would probably get more people to be interested and buy stuff in the caf or if we had like a salad bar and we had cold cuts for sandwiches.

When the cafeteria does not have an adequate number of healthy food choices that appeal to the young women as a group, the young women seek sources off campus, which may be contributing the loss of revenues schools are experiencing. This is the same problem the cafeteria is having with young men, but there are different behavioural motivations.

The act of purchasing and consuming food is a social event for the young women. The socializing that occurs during the purchasing and consumption influences the young women’s food choices. When eating at the school cafeteria or a restaurant, young women articulate choosing food similar to their friends.

*Question:* Do you go with your friends to the cafeteria?

*Amanda:* We go to the cafeteria and we all stand in line and like talk.
Allison: If somebody says something and you like it, oh I’m going to go there [to the cafeteria] too. So a lot of people tend to do that.

Question: Does going to the cafeteria with friends impact your food choices?

Jenn: Ya. Let’s say if Hannah and Katie go to the cafeteria, they’ll both come upstairs with pizza or both come upstairs with popcorn chicken.

These concepts were reinforced by the cafeteria staff’s observations,

Question: What do you notice about the behaviours of young women?

Cafeteria employee: Girls tend to come in the caf [cafeeteria] in small groups (five or six) even if only one person is purchasing she brings her whole posse with her. Girls are influenced by what other buys more than boys. If one buys something, the others are more likely to buy it.

Young women influence other young women’s food choices when they go to the cafeteria to purchase food together. Travelling as a large group to the school cafeteria or fast food restaurant to purchase items makes the girls feel more comfortable about eating “bad” or “unhealthy” food because others are also engaging in the indiscretion which may detract attention from an individual’s “moral shortcomings” and limit the influence of their eating behaviours on their social positioning, social capital, and appearance of a good biocitizen.

By assigning status to the types of food or the amount of food consumed, food pedagogies can contribute to social inclusion or exclusion among peers in a moralistic manner. Status associated with particular food items also conveys moral overtones that may define an individual’s value and character based on one’s eating behaviours. The assumption that all young women do not biologically need to consume as many calories as the young men or should be smaller in size impacts the young women, eating habits. The young women are uncomfortable eating in front of others for fear of judgment for their moral imperfections and failure to be responsible for one’s own health by choosing “healthy” foods or limiting their portions. The young women may purchase larger quantities of foods with their close friends or consume “unhealthy” foods because the young women are not alone in their moral failures and are part of a group so do not risk exclusion or loss of social status. If a young women’s peers are also breaking the gender and moral imperatives to eat healthy foods and limit consumption, there is “safety in numbers” to take cover from criticism.
Young men also experience social pressures in the types of food they should or should not consume such as diet products. One of the requirements of the School Food and Beverage Policy (2010) is the replacement of regular soft drinks with diet soft drinks. This requirement was already in place in elementary schools as a result of the Healthy Food for Healthy Schools Act (2008), but was new within secondary schools. By eliminating the types of food available for purchase in the school environment, this restriction can be classified as another food pedagogy. With health research drawing relationships between sugar-sweetened beverages and childhood obesity (Ebbeling et al., 2006; Ludwig, Peterson, & Gortmaker, 2001), banning these drinks and replacing them with diet or sugar-free drinks is considered a solution by researchers and health professionals to “slow down” or reduce the childhood “obesity epidemic” (Chacko, McDuff, & Jackson, 2003; Ebbeling et al., 2006; J. James, Thomas, Cavan, & Kerr, 2004). These relationships serve as the purpose or pedagogical force for banning these drinks in an attempt to foster or shape young people’s behaviours to preserve health. However, these restrictions do not consider current health debates surrounding the negative health risks associated with diet drinks, such as increased risk of cardiometabolic disorder or decreased bone density from cola consumption (Fowler, Williams, & Hazuda, 2015; Tucker et al., 2006; Whiting et al., 2001).

Rather, the pedagogical instructions the students receive by their availability in schools are that colas are not harmful if they are consumed in diet form. The implementation of this policy corresponds to research suggesting a recent decline in the number of overweight and obese Canadian youth as a result; the banning of sugar-sweetened beverages is thought to have contributed to that decline (Rodd & Sharma, 2016).

In recent years, Coke Zero has targeted their marketing to men with the design of a black can and through the use of sports and sexy women in their advertising, in order for it to be considered an appropriate alternative to Diet Coke for men (Cioban, 2015; Merritt, Christopoulos, & Thorpe, 2009). The marketing of Coke Zero to men has attempted to make it socially acceptable for men to consume low-calorie beverages, even going as far as to label the can with words proclaiming the drinker is a “grillmaster” or “bro” to reaffirm the drinker’s masculinity (Stoeffel, 2014). However, males may be more inclined to prefer the taste of Diet Coke than females. The number of taste buds and types of taste buds influence an individual’s taste preference (Drayna, 2005). The number and type of taste buds depends on sex, ethnicity, and age (Derval, 2010). Humans taste buds perceive sweet, salt, sour, umami (a strong meaty
taste), and bitter (Derval, 2010; Drewnowski, 1997). Diet Coke’s main sweetener is aspartame, which has a bitter after-taste. Coke Zero is sweetened using aspartame and acesulfame potassium, which does not result in the bitter after-taste. Women have a higher sensitivity to bitterness than men and would probably biologically prefer Coke Zero due to the lack of bitter after-taste, whereas men would be less likely to be bothered by Diet Coke’s after-taste (Derval, 2010). Dominant constructions of masculinity and media framing of “dieting” being a practice performed strictly by women prevents men from consuming “diet” products. As a Coca-Cola executive stated, young men do not drink diet soft drinks because “diet is a four letter word” men do not like (McWilliams, 2012). Accordingly, Diet Coke has traditionally been marketed towards women and Coke Zero towards men, allowing men consume a calorie-free product without risking their masculinity (B. Gough, 2007; Nobel, 2013). Despite biological evidence to counter the social influences, social pressures hold greater weight in eating behaviours.

The replacement of regular soft drinks with diet soft drinks in the school environment is not received well by the young men in the focus groups because consuming these beverages impacts their “masculine” image and is counterintuitive to heteronormative masculine images. The primary concerns of the young men are surrounding their social image and status with their friends if they were seen consuming these types of drinks.

Question: Have the changes in the cafeteria impacted your eating behaviour?

Michael: It has limited the market that they’re like a lot of people don’t like diet drinks, especially guys, the word “diet” in a drink turns a lot of guys off. That’s why they put out “Coke Zero” and “Pepsi One” because guys won’t drink the other stuff especially in front of other guys.

Patrick: It doesn’t stop me from drinking it. I don’t worry about the calories. I have a Coke in my locker right now, I brought it from home.

The young men from the focus group do not feel the need to regulate their calorie consumption or body weight, especially from restricting the types of beverages they consume. During adolescence, young men may feel pressure to meet the traditional Western male physique of being “big and strong,” which negates the need to consume diet drinks (Galambos, Almeida, & Petersen, 1990). Young men may desire to maintain a masculine social image, preventing them from consuming these beverages in front of their peers. Consequently, most young men found other sources for these beverages such as the home or retail stores.
In an attempt to change the behaviour of these young men, the strategy of eliminating sugar-sweetened beverages may be limited in its effectiveness when considering the intersection of the boys’ biological understanding of their biological requirements and the pressure of social influences. Although the young men may not physically require the beverages as a basis of biology, the status assigned to the types of food consumed may influence a young man to avoid diet products because of a desire to prevent exclusion from a social group.

It is important for the school cafeteria to seek feedback from the students within the school in an attempt to meet the different preferences which exist between young men and women. A driving premise of the School Food and Beverage Policy (2010) is to establish a school environment that encourages the students to purchase healthy food. The policy works as an essential and necessary “contact point” (Burchell, 1996) which allows for connections to be created between the government assuring its imperatives and the bodies of young people (Dean, 2010). Through the policy, the government can encourage healthy eating behaviours while protecting the health of young people. This approach is ineffective if the students leave the school environment to purchase food that meets their preferences.

*Question:* Do the new cafeteria policies change your eating behaviours?

*Sam:* I can’t buy some stuff here but like we have a plaza right there so you just can go buy whatever you want.

*Rachel:* If you see it in front of you, you’re more likely to get it. But banning it’s not teaching you self-control. I can get it somewhere else.

The policies may be the government’s programmatic effort, to apply an earlier observation by Rose, “to foster and shape such capacities so that they are enacted in ways that are broadly consistent with particular objectives such as order, civility, health or enterprise” (Rose, 2000, p. 323). However, this may be ineffective in establishing long-term behaviours. The students suggest removing the specific types of food may prevent some students from buying it immediately on school property, but it doesn’t have long-term impact on behaviour because the students can purchase the items from a neighbourhood establishment or bring them from home. The students express frustration that they were not taught the skills of making healthy food choices and rather the choices were made for them. The current food provided in Ontario schools may meet the guidelines outlined by the government, but it may not meet the biological tendencies or assist students with dealing with social pressures.
Chapter Conclusion and Recommendations

*PPM150 School Food and Nutrition Policy* outlines the nutrient requirement of all food sold within schools but does not consider biological assumptions or social issues that impact nutrient requirements, financial issues, concerns over social image, food preferences, or the types of foods that may be offered. The lack of consideration has decreased the effectiveness of this policy.

The resounding sentiments within the focus groups are that the price of food and types of foods offered within the cafeteria have resulted in students looking for food outside the school environment. When implementing the policy, the government did not consider the financial ramifications on the cafeteria companies to conform to *PPM 150*. Instead of providing the students with an environment with healthy food that would encourage students to remain at school, the policy has created an environment in which the food does not conform to students’ preferences and is too expensive for them to afford. As a result, the students leave the school environment to find food that does. The provincial government could subsidize the food sold in the cafeteria so the students are able to afford healthy choices and encourage students to remain in the school environment. Previous research suggests that when healthy food prices are decreased, there is an increase in their consumption (French et al., 2004). Without providing students with healthy options at an affordable price, students will take alternative options and go outside the school environment. In some secondary schools, the school could operate the cafeteria as a not-for-profit organization and have the students in culinary classes grow and cook the food themselves. Most focus group participants suggest students will find other food options if they are not provided them in school. Calls to action have been made by public health groups to implement a national universal healthy school food program (Food Secure Canada, 2015). Historically the federal government has provided limited or no funding to schools for the implementation of a school food program. As a result, the food programs vary between and within provinces. Establishing a national school food program would assist in addressing some of the inequities and food securities which exist in Canada.

One of the prominent messages from the students within the focus groups is the need and desire for the students to learn about what nutrients they need and in what amounts. Young women receive messages about what is healthy or unhealthy and how conforming to these requirements will assist in maintaining a slim figure, while young men receive and reproduce
messages about necessary protein and calorie requirements to develop and maintain a muscular body. The binary division of requirements for young men compared to young women should be replaced with an understanding of individual biological requirements and cultural/social influences. Nutrition education should focus on individuals’ nutrient needs based on activity levels, size, lifestyle, et cetera and avoid categorizing needs based on whether someone is a man or woman. The nutrition curriculum could also focus on other important issues such as food insecurities and equity issues to encourage broader thinking and global citizenship.

To explain differences between young men and women’s nutritional requirements or eating behaviours, students frequently used the term “natural.” When the students were asked for clarification about the definition of “natural,” no clear consensus was reached on its definition. This understanding of “natural” varied between students and between the students and their teachers. While Canada’s Food Inspection Agency regulates the use of the term “natural” for food products (Government of Canada, 2016), the use of the term for a science teacher may differ than that of an English teacher. The variation in the use of the terms creates tension in its use and may make it difficult for students to understand the implications of the term in different contexts. Although the term was used as justification or as part of an explanation to clarify any perceived differences its deployment is a catchall explanation to compartmentalize variations between young men and women and not within the two groups. With all external influences such as media, parents, advertising, et cetera, it is important for teachers to use a term such as “natural” with purpose and clarity to limit misuse or misunderstandings.

The students want to learn more about nutrition at an earlier age. With their bodies changing through their secondary school years, they want to know how to take care of themselves. Students often turn to health magazines or the Internet to obtain information about nutrition and other health topics. This can be problematic if the students do not have the appropriate skills to evaluate the information or its source. Incorporating nutrition information into mandatory physical education class, as well as data and media literacy, would assist students in developing a better understanding of nutrition and their bodies.

PPM150 restricts the types of foods offered in Ontario schools in an attempt to establish a healthier school environment. These foods may not meet the biological or social needs or preferences. This may result in the students looking elsewhere. Rather than providing students with opportunities to learn about nutrition in an environment that would be similar to what they
would face outside of school, restricting the foods within schools limits learning opportunities. Schools could provide information in their cafeterias about how to read a food label, what nutrients are in each food, or what particular foods do to support a healthy lifestyle.

When creating school policy, student voice should be incorporated to assist in understanding the impact of the biological assumptions such as caloric or nutrient intake and social and cultural influences such as peers and media influences on young men’s and women’s nutrition knowledge and eating behaviours. The intersection of sex and gender creates an intricate relationship that influences not only the nutrition knowledge of students but also their eating behaviours. The lack of consideration hinders the effectiveness of a school nutrition policy because, when students are unable to meet their needs or desires within the school environment, they will locate other sources outside the school.

Student voice combined with school food program advocates such as the World Health Organization, Center for Science in the Public Interest, Food Secure Canada, et cetera can create a universal national healthy school food program to meet the needs of the students the program could serve. This type of program should assist students in making informed food choices by providing them with the skills and knowledge necessary for the decision making; encourage students to take an active role in the creation and execution of the school cafeteria; and address food insecurities and equity by providing food at an affordable price.
CHAPTER 5: HEALTH AND PHYSICAL EDUCATION

CLASSES

The Development and Delivery of Health and Physical Education

This chapter presents the mechanisms by which biopedagogical instructions are incorporated into the health and physical education experiences of young men and women and through the lens of sex, gender, and their intersections. Particularly, this chapter elucidates the intersubjective and intrasubjective implications ascribed to health and physical education practices and performances. Deeply held beliefs about sex and gender contextualized in the realm of health and physical education (re)produce sex and gender binaries while establishing expectable or desirable physical activity performances.

Dominant social expectations of masculinity and femininity constrain young men’s and women’s experiences within health and physical education classes in manners that are not static but rather divergent, as gender is interlaced with class, social value, culture, sexuality, religion, and social structures (Penney & Evans, 2013). Health and physical education teachers are not impenetrable to their own obligations to express the masculine and feminine identities that are expected of them and that they role model to their students (D. Brown & Rich, 2002). Consequently, young men are urged to display physical valour through physical aggression, strength, and confidence, whereas young women acquire techniques to accentuate their feminine physicality through physical appearance, control, and presentation (Cockburn & Clarke, 2002; Flintoff & Scraton, 2005; Scraton, 1992). Policy analysis, focus groups with students, and interviews with key informants working in the school and school board were utilized to shed light on the meanings attributed to participation and engagement in health and physical education classes within an Ontario secondary school.

In Canada, provincial governments are responsible for the development and delivery of educational policy. Each provincial government creates curriculum documents or frameworks which outline the knowledge and skill expectations for each subject area. The provincial governments also determine the course requirements for a secondary school diploma. Within Ontario, health and physical education is a mandatory course requirement from kindergarten to Grade 9, with limited exceptions. Between the time of data collection and data analysis, the Ontario government released new health and physical education curriculum for Grades 1 to 12.
Since the participants’ reality and experiences were based on the previous version of curriculum, it is the primary source of contextual information for this study. The Ontario curriculum is established by the provincial government, but is interpreted by the individual school or classroom teacher (Ministry of Education, 1999a, 1999b, 2015a). It is significant to acknowledge the authority of the official pedagogical texts in combination with the cultural and historical contexts (Penney & Evans, 2013). It is undoubtedly important to examine how the schools and teachers themselves mediate these policies. Variations may occur between schools and within schools because of the interpretation of the curriculum documents and the pedagogy of classroom teachers.

The remainder of the document outlines the distinctions which are being made between young men and women as a result of biological assumptions and subsequent social behaviours. These distinctions are made through the structure of the class, types of activities offered, differences in rules, and acknowledgement of athletic ability. In most elementary schools, young men and women are taught health and physical education within the same class in elementary schools. Although it is not specifically stated in the past or most recent Ontario Physical Education Curriculum, physical education classes in secondary schools are typically separated by sex in Grades 9 and 10 (Ministry of Education, 1999a, 1999b, 2015a). In addition, some Ontario secondary schools offer same-sex classes in Grade 11 and 12 health and physical education courses. The course codes and curriculum expectations stated in the curriculum documents are not specifically established for a particular sex or gender (Ministry of Education, 1999a, 1999b). The single sex groupings in health and physical education have a long history and strong tradition, and the status quo is rarely challenged (Fletcher, 1984; Kirk, 1992a). Within Ontario, the segregation of young men and women into different classes is a decision made at the school level by the school administration and health and physical education department head.

All participants in this study participated in coeducational classes for health and physical education during their elementary school years. In the secondary school in which the study took place, there was one coeducational class in Grade 9 to accommodate the French immersion cohort. The remaining Grade 9 and 10 courses were segregated by sex. Young men taking health and physical education in Grades 11 and 12 were offered only coeducational classes, while young women have the option of enrolling in a class with only young women in either Grade 11 or 12. Although the curriculum foundations of the same-sex classes are the same, the information
provided by participants in the focus groups as well as through interviews with key informants, indicate that (re)productions of sex, gender, and its intersections do occur in the physical culture of the health and physical education environment.

The structuring of physical education classes: Meeting the biological needs of young men and women or meeting the needs of cultural expectations?

The Ontario health and physical education curriculum outlines specific knowledge and skills that students within the classes are expected to be exposed to, engaged in, and able to perform for each course or Grade. For example,

by the end of the [Grade 9] course, students will: use and combine movement skills in a variety of physical activities (e.g., apply locomotion/travelling, manipulation, and stability skills to a specific activity (Ministry of Education, 1999a, p. 8).

Research has shown that gender-based ideologies concerning fundamental differences between young men and women can influence the thinking of physical education teachers and infiltrate their pedagogical practices (Hunter, 2004; Satina, Solman, Donetta, Loftus, & Stockin-Davidson, 1998; Scraton, 1992; Wright, 1995). These differences in ideologies can influence the structure of health and physical education classes and the types of activities that are offered. Understandings or positions about abilities often create justifications for differences in achievements (Hart, 1998), schooling reform (Davies, 1995), or identification of athletic talent (Gibson, Okely, Webb, & Royall, 1999). In reality, despite the neutral language of Ontario’s health and physical education curriculum, it can still perpetuate competitiveness, meritocracy, and physical elitism (Dewar, 1990; Tinning, 1990). In this school, the types of activities offered in young men’s and women’s health and physical education classes differ and create a physical competency hierarchy.

Metheny (1965) first investigated social stereotypes about the appropriateness of physical activities for men and women. Feminine activities were described as lacking face-to-face competition, overt aggression, and were aesthetically pleasing, whereas masculine activities were aggressive, competitive, involved bodily contact, and had a high degree of face-to-face (Metheny, 1965). The categorization of some physical activities as male or female has been reaffirmed in later research studies (Riemer & Visio, 2003; Schmalz & Kerstetter, 2006). During the focus groups, intersubjective accounts by participants convey that activities offered in the young men’s and women’s classes were different. The activities in the young men’s classes are
generalized by the students in the focus groups as physically intense and focusing more on sports or team-based activities, while the young women’s classes are generalized as less physically demanding and comprised of primarily cooperative games.

**Question:** Why are there differences in the types of activities in young men’s and women’s classes?

*Eric:* I just don’t see like when we’re [young men classes] going to play sport or a game or do any kind of activity, they [young women classes] seem to be like doing, ya more like almost like primarily activities like the chicken tossing game. I’ve seen them play soccer and stuff. It seems like less than us. More kiddie games.

*Ashley:* Boys are naturally more aggressive because of testosterone and like those type of activities.

*Ben:* There are differences because of hormone levels, they [young women] act differently in phys-ed.

The perception of the activities in the young women’s classes is that the activities are infantile and reinforce the idea that young women cannot physically engage in the same type or intensity of physical activity as young men. The students justify these differences because of biological hormone differentials without giving consideration to social forces which may be at play. The health and physical education environment is a pedagogical site which has the “power to teach, to engage learners in meaning making practices that they use to make sense of their worlds and their selves and thereby influence how they act on themselves and others” (Wright, 2009, p. 7). The pedagogical and structural differences between young men’s and women’s classes reinforce “truths” and provide pedagogy about the physical capabilities or competences and influence how they act on themselves and treat others. The young men and women are given opportunities to monitor and regulate their bodies, but only through activities which are deemed appropriate for their gender as determined by their classroom teachers. Most of the focus group participants think the activity differences are appropriate and justified because young men and women “naturally” enjoy different activities. These students understand the differences in the types of activities offered and the differences in the structure of the class as a response to underlying biological differences between young men’s and women’s classes. Although the young men and women participated in coeducational health and physical education during elementary school and participated in the same activities during that time, most of the focus group participants understand the current differences in activities within their high school health and physical
education classes to be a function of biology. However, these differences in class structure between young men and women reinforce and maintain gender through the everyday and repeated actions of the staff to differentiate the activities as noted earlier in research by Berg and Lahelma (2010) and Vertinsky (1992).

To cover the curriculum expectations, teachers have some flexibility in the choice of activities and structure within the classroom. To accomplish the physical requirements of the health and physical education curriculum, the classroom teachers in this study often choose different activities for young men or young women to participate in. When describing the decisions for structuring the classes, the health and physical education teachers state a need to meet their students’ interests:

Question: Why are there differences in the types of activities offered in young men’s and women’s classes?

Ann: Girls love GLOs [games of low organization]. Girls would do an entire semester of GLOs where guys would be okay with a week or two of GLOs but then they wanna play football, they wanna play ball hockey. They [young men] do want an element of sports so you gotta kinda know what your structure is and who your clientele is.

Heather: The girls will do more [activities], they might incorporate a dance unit or yoga or you know, more traditionally daintier activities that girls might enjoy whereas the boys might do self-defence and they’ll traditionally play more football or more ball hockey or dodgeball.

Unlike the students within the focus groups, when discussing the differences in the activities offered, the teachers did not justify the differences as a symptom of biology; rather the differences in the classes were justified as preferential choices between young men and women.

Generalizing activity preferences for young men and women is a problematic approach because it places limitations across and within each group by ignoring the intrasubjectivity and intersubjectivity of the young people within the classes. Young men and women are not homogenous in their preferences within these binary groups, and preferences for health and physical education content is correlated to the specific situation, as demonstrated by previous research and reaffirmed through this study (Azzarito & Solomon, 2005; L. Hills, 2006; A. Williams & Bedward, 2001, 2002). Biological markers do not exist to establish a preference for young men or women to prefer a specific type of physical activity based on their sex. Presently, no research has demonstrated that a hormone, specific genes, cells, et cetera influences a
preference in physical activity; rather preference may be a function of environmental or cultural factors (Sallis & Glanz, 2009). The activities presented to the young women reinforce heteronormative feminine discourses about the types of physical activities they should enjoy and engage in. The emphasis on playing games downplays the physicality that would be expected if the young women engaged in sport. The conscious activity undertaken by teachers to implement contrasting opportunities enhances the students’ understandings of their corporeality and assists in the regulation, normalization and, disciplining of their bodies to complement cultural expectations.

Although gendered behaviours rather than biological determinants may be used to justify or reason the differences in curriculum delivery, other focus group participants did not understand the differences in curriculum interpretation by the teachers that result in the delivery of different activities. Young women within the focus groups state their desire to play competitive sports instead of the games that are commonplace in their health and physical education classes.

Question: What activities would you change about your phys ed class?

Becky: I hated all the girls gym classes because all we did was play badminton. We never played any real sports…I hated that more than anything.

Hannah: I wanted to play football and then [my teacher] said yeah, we’ll play flag football, it’ll be awesome and I’m like okay just ‘cause I’m a girl you’re just saying like that’s what I’d play, flag football, instead of like going out there and tackle and stuff.

Ashley: I just kinda wish we did more actual sports ‘cause I think even at other schools, they kind of sample a bunch of sports so that in Grade 10, you could try out for a team or something if you’ve never played before and see if you like it.

These young women defy their gendered expectations and want to participate in activities that are traditionally associated with masculinity. Expressing their desire to participate in these other sports, the young women are defiant of the teachers’ construction of heteronormative femininity and seek alternative performance of unconventional feminine identities. The young women express their frustration that they are not given the opportunity to play sports because of assumptions made about the types of activities young women prefer to engage in. The young women are not resisting the discipline of their bodies but rather the agents of discipline. Girls within the focus group want more opportunities to play sports and to try activities such as
football and rugby because they do not have an opportunity to sample these sports outside of school. Several young women did not have opportunities outside of the school environment to try different physical activities so wanted to have the same opportunities or exposure as the young men.

**Question:** Do you participate in physical activities outside of school?

**Ann:** Most people if you don’t like not including me and a couple others for sure, they like think oh well girls are gymnasts and they dance and they do like all these easier sports and boys play football and hockey. I think it’s all based on stereotype and but I can’t dance at all so, so I don’t know, that sucks for you ‘cause if you don’t, if your physical ability doesn’t work with what they expect of you an what they think is required of a female or male athlete, then you’re obviously marked differently. But maybe I just want the opportunity to try new things and find out what I’m good at.

**Mel:** Well I walk, but its boring. I would like to try other things but don’t know what to do. It would be cool to try different things in class and see what you like.

**Ann:** Ya, like try things we wouldn’t be able to try on our own, like rugby or ultimate [Frisbee].

Providing young women with an opportunity to try alternative sports or physical activities might spark interest in pursuing those activities outside of school and encourage lifetime participation. Furthermore, variations in physical activities would increase students’ physical literacy, which is applicable in all circumstances.

It is not just the young women who do not understand the differences between young men’s and women’s classes; some of the young men within the focus groups also do not understand why the differences exist. The young men also think this impacts how young women were treated and the assumptions made about their physical abilities.

**Question:** Why are there differences in the types of activities offered in young men’s and women’s classes?

**Eric:** The types of activities the girls play in class gives you the idea they aren’t real athletes.

**Brad:** They [young women] just mess around [in class] and scream, it [class] isn’t taken seriously by them because they aren’t treated seriously.

The young men in turn suggest the young women do not take physical activity seriously because they are not treated as athletes like their male counterparts are. The physical activities offered to
young women may not be taken seriously because they are not participating in traditional sports that would classify the young women as “real” athletes. Alternatively, the young women may embody their gender role and may not genuinely engage in the physical activity because they are not expected to act like “real” athletes. The young men’s and women’s accounts demonstrate a blending of surveillance with influential cultural norms about the appropriateness of activities for a particular sex and embodiment of performances within the physical culture of the school environment. Participation in activities which are classified as masculine would undermine the young women’s construction and performance of feminine identities. Although some young men and women attempt to challenge and expect equal opportunities, they also struggle not to reiterate biological reasons for the gendering of practices and do not outwardly challenge the current structures.

When the young women do play traditional sports in class, differences exist in the types of equipment used in young men’s classes compared to young women’s classes. In the young women’s classes, using foam balls or beach balls is common instead of using the regulation equipment for sports such as volleyball, baseball, or soccer. Health and physical education teachers explain the modifications exist to help with skill development.

**Question:** Why do teachers organize different activities or use different types of equipment in young men’s and women’s classes?

*Frank (staff):* Modifications are there for the, not necessarily the strong girls but for the weaker girls that are in the class. What should happen is the weaker girls should be paired with stronger girls on teams and/or skill development happen so that they can handle playing with the regulation ball.

However, this is interpreted by most young women in the focus group as assumptions about their physical capabilities to use the real equipment.

**Question:** Why are there differences in the types of equipment used?

*Becky:* In volleyball we [young women] had to use this big blow-up beach ball but all the guys were like there like whacking it in each other’s faces and there was like okay, we’re stuck with this beach ball. It is so annoying like do you think I’m like that fragile that I can’t play with an actual volleyball?

**Question:** How does the differences in activities or equipment impact your experience in phys ed class?
Emily: There is less pressure on you to do well and you don’t have to pretend like you’re good at something.

This modification impacts biological understandings for young men and women and also impacts the gendered behaviour of the young women within the classes. Physical activity is often associated with strength, masculinity, and skilful or strong embodiment (Hickey, 2008). This is at odds with what is embodied or idealized as femininity (Butler, 1998). The assumption made by the teachers that young women may not be able to handle the physicality of playing sports and using the “real” equipment reinforces dominant discourses. As a result, the young women may take an underperforming position to maintain their feminine positioning (Fagrell, Larsson, & Redelius, 2012). This causes a cyclical reaction because the young women do not engage in the activity, which results in the young women not gaining confidence about their abilities, and therefore not putting forth the effort required to physically challenge themselves within the sport. As I. Young (2005) suggests, young women often approach physical activity tentatively because they do not want to look awkward or be embarrassed. The young women in the focus groups for this study are consciously aware that they are under surveillance by their peers and teachers. As a result they do not always put forth effort in physical activity. These behaviours are the young women’s embodiment of dominant discourses and attempts at “doing girl,” which does not require physical competence and expects underperformance. The young women receive messages about regulating and disciplining their bodies such as appropriate activities and levels of effort for young women who are always under the evaluative gaze of their teachers and peers, to regulate and discipline their bodies in utilizing feminine ideology.

The present structure of health and physical education classes and the types of activities offered in young men’s health and physical education do not meet the needs of all the young men within the classes. Rønholt (2002) suggests reinforcement of a particular type of masculinity contributes to the construction and delivery of curriculum or establishment of the physical culture. Deeply held beliefs about young men’s “natural” interest in sports influence the activities that are offered in class (Atkinson, 2014). In this school, playing sports such as football, hockey, basketball, dodgeball, et cetera are the normal daily activities in the young men’s health and physical education classes. The focus group participants describe these types of activities as appropriate for young men because of the activities’ required physical demands and aggressive
nature. Participants cite the presence of testosterone and a societal expectation as the reasons for young men’s assumed need to play sports or engage in aggression and competitions.

**Question:** Why are there differences in the activities between young men’s and women’s physical education class?

**Oliver:** Guys are more aggressive, the rules and class reflect society.

**Jane:** Guys are more aggressive naturally because of testosterone and I think they are allowed to be that way in phys ed class.

**Oliver:** I don’t really know if you would consider Mr. Jones like the ideal teacher because he acts like a kid but like he’ll make the same jokes as us and talk about testosterone making us more competitive or not having enough of it.

**Sam:** For guys, in order to succeed the guys will just try really hard in order to win because that is important for a guy but the girls are just looking to fit in in terms of not trying as hard basically, 'cause it looks cool to not try.

**Tom:** Sometimes like when we were playing ultimate Frisbee guys get really into it and get really aggressive and tackle and stuff. I don’t like it but I can deal with it.

**Sam:** I can kind of completely understand the perspective that you're coming from because I mean this is kind of going back, not so much in high school but in Grades 5 and 6 I was like, I'm still incredibly competitive but at that time I was sort of too competitive and it come off sometimes like, maybe like a bullying a little bit and then Grade 7 and 8 I was with, I went to a new school and was with kind of a crowd of kids who, they were very competitive but at the same time sort of very accepting and I learned how to kind of involve everybody in the group yet still stay competitive. So I mean I can see it all the time where you'd see — I don't know what kind of language I can use but like the guy would just be like you're just, like you just see him make a play and just like you're an "A" hole, like why did you do that. Right? Like it's just so way too physical and aggressive as like a couple of years ago I would look at that and just say "He's really going for it."

Physical education and sports within educational contexts play important roles in influencing and shaping the desires of young men (Kirk & Spiller, 1994). Sports celebrate male physicality and dominance while reinforcing hegemonic masculinity (Bryson, 1990). Young men are expected to be tough, competitive, physical, and aggressive (Bramham, 2003). The focus groups participants’ comments reflect dominant discourses surrounding the biological ability of young men and their “natural” requirement to engage in physically demanding activities. Health and physical education class is determined by focus group participants as an opportunity for the young men to discipline their bodies through the expression of their male physicality, which in
turn increases the physical capital of the young men who embrace hegemonic masculinity and regulate their bodies through their corporeality (J. Hills, 2015). The simplification and disregard for multiple gender discourses allows for practices of hegemonic masculinity to go unchecked and are not dismissed as problematic (Connell, 1987; J. Evans, 2006). However, for young men who reject this construction of masculinity, the focus on sports to regulate and discipline the body within the physical education culture does not provide them with a supportive environment that allows the participants to engage in other types of physical activity.

The young men in the focus groups were reluctant to admit that they did not want to participate in traditional physical activities or sports such as basketball or football. The young men are subconsciously aware of the evaluative gaze of their peers, which contributes to their hesitation to suggest in front of their peers that some young men reject the hegemonic masculinity they are expected to embrace. When the students are asked about why they dropped out of health and physical education, some young men describe their dislike for the need to exemplify their “natural” competitive, aggressive tendencies and are supposed to enjoy the sports they play in class every day.

*Question:* Did you take health and physical education class after Grade 9? If not, why did you stop choosing that course?

*Josh:* I know like the classes are really big in Grade 9 and it’s probably difficult but I think you just need to stress a wider range of physical activity. Like I mean dodgeball four times a week and then walking around the weight room the fifth day isn’t good enough and there are a lot of people who don’t like that, I don’t like that.

*Alan:* I would prefer activities that were more focused on the sorts of physical activities you’d be likely to come across in real life, since school is about application.

*Josh:* I feel like in phys ed there can be so many things that can be very quickly applied to your life in the present that just really need to be stressed.

*Tyler:* I would try yoga, I know it’s good for me with flexibility and stuff, but I wouldn’t do it on my own.

*Alan:* I may be biased but things like bicycles and walking and swimming would be good. I don’t like the aggressive or competitive sports.

Most of the young men in the focus groups were open to the idea of incorporating nontraditional activities such as yoga, Pilates, swimming, et cetera, into the class because the young men feel the need to monitor and regulate their bodies but would not initiate alternative activities on their
own. This suggests that some young men reject the natural assumptions about their “natural” aggression and competitiveness but are aware of the evaluative gaze of others so are reluctant to defy the normalized practices of health and physical education to regulate and discipline their bodies. Still, health and physical education classes are an opportunity to provide young men exposure to different physical activities. Nevertheless, the current traditional programming available to young men in health and physical education classes reinforces the underlying biological ideas that young men need to participate in sports as part of a “natural” physical need to be aggressive because of the presence of testosterone. Some participants’ voices suggest the current programming’s emphasis on sports overshadows the desire of some young men to participate in other types of physical activity and, as a result, demit from health and physical education after it is no longer mandatory. Without the social reinforcement through the emphasis of physically aggressive activities, the understanding that the utilization of testosterone is biologically necessary may not persist.

Controlling of the type of activities in young men’s and women’s classes are disciplinary practices that teachers hold over their students’ bodies. Foucault suggests practices such as exercise or restricted eating are “not only so that they may do what one wishes, but so that they may operate as one wishes, with the techniques, the speed and the efficiency that one determines. Thus discipline produces subjected and practised bodies, “docile’ bodies” (Foucault, 1977, p. 138). The teachers’ choice of modified activities or the deemphasis of sports for the young women reinforces dominant discourses that the young women are not “naturally” interested in or physically capable of the aggression and strength that are required or associated with sports. The disciplinary practices also assist in maintaining the young women’s bodies as soft or slim, as well as (re)produce normative femininity behaviours which are devoid of aggression or muscular strength. The young women receive discourses which encourage them to be alienated from their bodies and limit engagement in physical activity, which may be a result of the objectification of their bodies (Paechter, 2013). To be aggressive or muscular requires the young women to take up more space compared to a feminine, passive body (I. Young, 1980) and breaks convention of the desired sex and gender behaviour (Butler, 1990). Although the young women acknowledge the differences in the activities between young men’s and women’s classes, the young women struggled with challenging the traditional power relations as well as dominant discourses about “natural” differences and appropriate ways to regulate and discipline as a manoeuvre to
normalize their feminine bodies. For young men, the teachers’ teaching practice of emphasizing sports attempts to discipline the young men’s bodies to conform to hegemonic masculinity and is a mechanism to turn docile young men into fit, functional, sporting bodies. It also (re)produces dominant discourses surrounding the “natural” requirements of young men’s bodies and behaviours. These teaching and disciplinary practices limit the production of multiple masculinities and masculine bodies.

**Game Changer: Modifying the Rules of the Game**

In this secondary school, most of the Grade 9 and 10 health and physical education classes are structured so the young men and young women participate in physical activity separately. However, the focus groups participants spoke of occasions in which the young men’s and women’s classes merge and the students engage in physical activity together. On these occasions, participants state that teachers establish different rules for young men and women when they are participating together. This practice is determined and implemented by the teachers rather than contained within policy. Within the Ontario curriculum, the modification for rules is only stated as a strategy for exceptional students to promote integration and safety:

> In health and physical education, meeting the needs of exceptional students may involve making a variety of adaptations both to the program itself and to the learning environment. These adaptations should include… program adaptations to promote integration and safety (e.g. altering the methods of instruction, using alternative facilities, modifying the rules and guidelines of physical activities). (Ministry of Education, 1999b, p. 17)

There is nothing in the curriculum documents to indicate the need to modify activities for a particular sex. The participants argue the teachers establish different rules for young men and women because the young women are not physically strong enough or not as physically competent to compete at the same level as young men.

**Question:** Some participants mentioned that there are differences when the young men’s and women’s classes are combined? What is different? Are there different rules or modifications for young men or women?

**Samantha:** Ya all the time like in dodgeball.

**Question:** What happens differently in dodgeball?

**Ashley:** They [young men] throw harder so they [teachers] think that the girls are like way weaker so that like, they weren’t allowed to hit the girls but the girls were allowed to hit everyone.


Samantha: The girls are allowed to go up to sort of like the closer attack line or whatever, because they [teachers] don’t think we [young women] can throw [the ball] as far.

Emily: They [teachers] try to like overcompensate for like girls, thinking that we can’t do it so they [teachers] give us like advantages, which is pretty much just saying that we [girls] don’t we can’t do it without it.

The differences in rules reinforce dominant discourses that all young women are not as biologically strong or physically skilled as all young men. Changing the rules or giving advantages to young women is considered necessary in order for young women to be competitive when playing with or against young men. These types of modifications can impact how the young women feel, not only about their physical abilities but also their bodies. What is valued in the athletic contexts starkly contrasts what is valued in embodied femininity (Butler, 1998). The modifications prevent any comparisons between the physical abilities of young men and women because the young women are perceived as being given a competitive advantage. This allows the young women the opportunities to discipline their bodies in a manner which reproduces normative femininity by demonstrating physical inferiority to young men.

The young men are also persuaded by the permeating biological discourses that young women are weak, fragile, or physically inferior in contrast to the young men’s large physical stature and superior physical competence. This translates into different behaviours for the young men during their interactions with young women. Young men in the focus group spoke about being uncomfortable if they were participating in a physical activity, particularly if physical contact with young women was required or could occur.

Adam: We [boys] are bigger and stronger so we will hurt them [young women].

Alex: We have been told our whole life not to hit girls so it would be weird to do it in a game so we just don’t do it.

Jack: [Having different rules] is almost fair because guys are a little bit taller naturally. Like if guys are taller than the net is going to have to be a little bit taller. For hurdles, they’re all higher because your legs are just longer. So it’s not like a, it’s just a way to make sure it’s all fair ‘cause if you were to play on the same height of a net then it wouldn’t be fair that I can just reach up and spike it down on you when you have to like leap into the air to get the ball.
The participants state their teachers remind the young men that they are not allowed to be “rough” or “physical” with the young women when participating together. The young men receive reinforcement and reminders from their teachers about young women being less capable in sports and the young men’s physical dominance over them. In turn, this reinforces discourses of young women’s physical abilities and the performance expectations of young men. The young men and women (re)produce discourses concerning the physical size or ability of young men and women. Participants use these ideas as justification for the differences in physical activities and use of accommodations within physical activities. However, none of the focus group participants express concern about making generalizations about the physical size differences within young men or within young women, nor did the participants express any concern about the need to accommodate within these groups. The participants do not consider that some young men, not young women, might need modifications to meet the physical tasks or compete at the same level as their peers. All young men are expected by their peers to discipline their bodies without modifications and without complaints. However, the differences in physical size for some young men may impact their engagement within a health and physical education class.

**Question:** There has been some talk about the physical size of young women and how that impacts their participation, but what impact does size have on young men?

*Will:* In Grade 9, some of the guys who were smaller and less athletically inclined… there were a few of them that kinda still got a little bit singled out or a little bit picked on, you could tell they didn’t want to be there.

The same physical expectations may exist for all young men regardless of their physical size. Masculinity may have bearing on what they do, how they look, and who they dominate (Burns & Kehler, 2014). The young men receive messages about their bodies and which activities they should be physically competent at as well as who they should dominate over. Young men who fail to demonstrate physical dominance over their peers, regardless of their size, are at risk of their masculinity being challenged by their peers along with their teachers.

The teachers suggest the rule modifications are necessary when the young men and young women play together because the young women do not have the skills necessary to play with the same capabilities of young men and therefore the young women do not put forth any effort to participate without the modifications.
Question: The participants spoke about modifications that are made when young men and women engage in physical activity together. As a teacher, why might you create modifications or change rules for young women and not young men?

Matt: If we [teachers] didn’t change things for the girls, most wouldn’t do anything because they are intimidated by the boys.

Question: What impact do you think this has on the young men who might not be as skilled?

Jill: I hadn’t really thought about it.

When asked about accommodations for young men, the teachers do not consider making the accommodations because their primary focus is on the young women. Modifying the rules would be counterintuitive to dominant discourses about the natural abilities of young men and the disciplinary techniques physical activity provides, which are the very same techniques which young men are considered by their peers and teachers to enjoy and excel at. If the young men are accommodated or modified, they will be unable to regulate and discipline their bodies in the expected manner, which contributes to their failures as biocitizens.

The modification of rules or adaptations of physical activities for young women (re)produces discourses about their physical inferiority. Adapting the game or modifying the rules feminizes the disciplinary techniques employed in health and physical education class. Some young women may not challenge these discourses because it allows them to take an underperforming position that does not challenge their femininity while still disciplining their bodies to become good biocitizens. Other young women may not know how to challenge the dominant discourses and therefore do not question the teachers’ decisions.

The associations of modified rules and femininity can have resounding implications for young men who do not assimilate to the hegemonic masculinity expectations. The young men may feel pressure to conform to the standards and do not ask for modifications in fear of risking their masculinity. The presence of the admired and dominant pattern prevents the young men from challenging the status quo and ultimately puts pressure for them to match the pattern (Frosh & Pattman, 2002). To challenge the current practice would align with feminine performance or qualities and would be counterperformance to masculinity (Mac an Ghaill, 1996). Accordingly, the young men who cannot match the practice or may desire the modifications choose to withdraw from health and physical education rather than take the risk of asking for change. This
places the young men in another compromising position because their failure to monitor and regulate their bodies is also a failure as a productive and contributing citizen.

**Acknowledgement of Athletic Ability**

Dominant cultural and institutional discourses related to gender, performance, healthism, or biopedagogy influence the construction of physical activity identities (Mooney, Casey, & Smyth, 2012). A gymnasium acts as a pedagogical site that offers young people the opportunity to change themselves and take action towards their best physical health and personal self (Wright, 2009). Athletic ability is often assumed to be an interrelationship between genetics and the environment (J. Evans, 2004; Wright & Burrows, 2006). An individual’s ability is an innate quality which is influenced by his or her environment. The body is perceived as a measurable entity which can be shaped, modeled, or fine-tuned to meet demands and perpetuated ideas surrounding the body as a machine (Hay & Macdonald, 2010; Shilling, 1993a). It is understood that an individual’s ability or potential can be identified through anthropometric, physiological, and psychological characteristics measures (Abbott & Collins, 2002; Pienaar, Spamer, & Steyn, 1998; Reilly, Williams, Nevill, & Franks, 2000). More recent understandings about the notions of inherited physical abilities have raised issues with the social and cultural influences into the beliefs and existences of abilities (Bailey & Morley, 2006).

In Western culture, athletic role models are primarily male dominated and embody hegemonic masculinity through their physical appearance and athletic achievements (Alley & Hicks, 2005; Dworkin, 2001; Wiley, Shaw, & Havitz, 2000). Athletes are often branded by masculine qualities such as aggression, strength, power (Dworkin, 2001; Krane, Choi, Baird, Aimar, & Kauer, 2004). As a result, young men may be deemed more athletic or physically capable than young women. Different understandings or circulating discourses about an individual’s sex and its influence on ability may influence the social behaviours of young men and women. “Young people negotiate their meaning in the context of specific geographic and social locations…they must negotiate the discourses available to them in order to establish their membership within legitimate categories of being” (Cairns, 2014, p. 480). The dominant discourses in broader society about ability or physical identities may be reinforced by hidden curriculum within the gymnasium.

Students within the focus groups frequently make statements that young men are “natural athletes” and “more physical” than young women. Young men are described as having a “natural
ability” (Ben), being “muscular” (Sam), and that “[sports] comes easier for guys” (Crystal). Young women on the other hand, are described by focus group participants as “thin,” “flexible,” or “not as good as guys” (Abby). These understandings and the assumptions that surround them may impact the engagement of young men and young women in health and physical education classes.

For young women, particular discourses about femininity may result in their wavering between being pressured to conform to gender demands and using their full physical capacity while engaging in physical activity (Garrett, 2004b; I. Young, 2005). Some young women within the focus group embody the idea that young women are not required to demonstrate, nor do they acquire an athletic ability, and as a result, do not feel the need to challenge themselves or each other while engaging in physical activity.

_Hilary_: [In class] you don’t really judge each other, it’s just like, you can all suck together.

_Hannah_: Girls, we kinda joke about it [athletic ability] and to make it like funny and like they say oh this might help and like kinda put it in but we don’t like budge into other people’s business like they don’t wanna lay back then it’s fine. We’re not really annoyed when people drop it [the ball] because accidents happen.

_Jane_: I feel girls quit [health and physical education] because they’re not as good at it they feel like they won’t do good if they continue it and like they kinda socialize so if there’s one girl socializing then all the girls tend to.

Some young women state they do not put forth any effort in physical activity because they do not believe they would be good at the activity regardless of their level of effort. The young women take on a physical identity that reinforces dominant discourses that suggest it is not a requirement of femininity for young women to participate in sports, but rather social behaviours should be emphasized over physical exertion. I. Young (2005) states,

_for the most part, girls and women are not given the opportunity to use their full body capacities in free and open engagement with the world, nor are they encouraged to use their full body capacities in free and open engagement with the world, nor are they encouraged as much as boys to develop specific bodily skills._ (p. 43)

Underlying assumptions about athletic ability being a predominantly male and biological entity may reproduce physical identities in young women of inadequacy and self-exclusion. The presence and surveillance of other students allow or encourage the young women to self-regulate themselves to “quit” rather than adopt an unfamiliar or counterintuitive physical identity which
would require the young women to challenge their bodies to learn new physical skills. For these young women, exhibiting athletic ability is not a requirement for social acceptance, nor does it privilege the young women within their peer group, which results in the young women giving up or withdrawing because of their perceived lack of skills or ability.

For the young women who embody a physical identity that challenges the status quo, they face the challenge of proving themselves and their athletic ability to their peers and teachers. Some of the young women express frustration in the assumptions that they are always considered less skilled than young men.

*Ashley:* Even if a girl is more athletic than a guy in the class, the girl would get picked last for a team.

*Abby:* Boys are perceived to be stronger and better which means girls have to work harder for it and prove them wrong.

Although this may challenge some young women to try harder, other young women may not have the desire to fight the stereotypes about their ability, which may result in the young women not participating. When the young women engage in physical activity with young men, the young women in the focus groups declare that they are made to feel as though they are not physically good enough as athletes and would let the team down.

*Abby:* If we lose, they’ll [the boys] blame it on you.

*Liam:* There’s always girls on your team. It’s kinda like when they step up and then they kinda let you down all your work and then it’s kinda more of a disappointment.

*Adam:* I feel bad for girls like when we’re playing with the guys, that girls if you’re not good enough you just don’t do anything ‘cause you feel like embarrassed when you do something and you’re bad at it.

The dominant discourse about the natural limited athletic ability of young women creates an evaluated and disinviting environment for young women to participate. The evaluative gaze of their peers or teachers may be too overwhelming for the young women to counteract and may impede their athletic performance (Fredrickson & Harrison, 2005). If the young women believe that athletic ability is a fixed entity and one that they may not possess, the young women may develop a sense of helplessness or avoid interactions which require the ability (Hay & Macdonald, 2010; Ommundsen, 2001). Therefore young women looking to challenge discourses may be discouraged by the interactions with peers and teachers and their understanding about the
natural differences in ability. This in turn may cause young women to demit from physical activity.

The majority of young men and women in the focus groups reveal discourses referencing the natural ability of young men to excel at physical activity. Consequently, young men may struggle with the dominant discourses if they are unable to demonstrate their “natural” physical dominance over their peers. Health and physical education classes are physical spaces which encourage young men to display their bodies and are subjected to “surveillance and regulation of the gendered body or rather the disciplining of the gendered body inscribed with certain hegemonic traits of masculinity” (Martino & Beckett, 2004, p. 245). In focus groups, the young men are reluctant to admit that their own physical abilities might make them a target of their peers. This might be because of the public nature of the focus groups and the evaluative gaze of others participating. However, the young men do speak openly about the experiences of other young men who are teased or singled out if they are not as physically capable as their peers.

**Question:** What happens to people in your classes who may not be as good at sports?

**Ben:** There’s always the group of guys that are good at stuff in Grade 9 chirping the other guys. Like oh yeah you can’t do a thing and just like make fun of you.

**Matt:** I had like quite a group of guys in my Grade 10 class and they would chirp [tease] each other if they weren’t good at things. They were just being guys and [my teacher] would like chirp on them.

**Adam:** I know some of the guys who are less athletically inclined…for those sort of guys who weren’t necessarily like there was only a few of them that kinda still got a little bit singled out or a little bit picked on.

**Liam:** There’s a few guys in our gym class I guess that are almost like made fun of just ‘cause they weren’t like I don’t know as skilled but like still participated and you could see that they would get down on themselves just ‘cause everyone was like chirping them and stuff.

The young men who are unable to demonstrate the same physical abilities of their peers may find themselves isolated or ridiculed. “Language does not simply mirror gender; it helps constitute it, – it is one of the means by which gender is enacted” (S. Johnson, 1997, p. 23) The language used by the students and teachers police the young men’s gender by marking some behaviours as inappropriately masculine. Only a few young men and women suggest that sociocultural issues may influence their perceptions of an individual’s ability. Historically, sports praise male
physicality and dominance (Bryson, 1990) and this in turn requires young men engaging in these activities to embody a hegemonic masculinity and physical power (Whitson, 1990). To be masculine “is quite literally, to embody force, to embody competence” (Connell, 1987, p. 27). Connell and Messerschmidt (2005) suggest for youth “skilled bodily activity becomes a prime indicator of masculinity” (p. 851). Young men who fail to meet the expectations risk social consequences. Wright (1999) found young men who did not demonstrate forms of hegemonic masculinity through aggressive and competitive behaviours or were low skilled in sports were marginalized or bullied. In this study, the young men are hesitant to acknowledge their limited physical skills or even their desire to participate in physical activities which do not require strength, aggression, or physical dominance over their peers. To acknowledge their limited skills would require the young men to challenge social pressure and dominant discourses and would call their masculinity into question. The current deployment of the health and physical education curriculum with an emphasis on sports rather than other forms of physical activity privileges some young men while marginalizing others.

During the interviews, teachers were asked about conversations they may have with each other about the athletic abilities of young men and women. The teachers propose those conversations mostly occurred about differences between young men and women and how to meet the different abilities between the two groups.

*Question:* Among other teachers or in your workroom, do you have discussions about the differences in ability between young men and women?

*Matt (staff):* It’s conversations slash arguments about you know well you guys do this all the time and so it’s the testosterone versus the estrogen and they tend to be very nonproductive conversations.

*Question:* Are there ever any discussions about the differences within the groups and what to do about the variability?

*Matt:* Not really anything formal

The lack of conversations among teachers about implementing pedagogical practices to address differences in physical abilities within young men and women inherently translates into pedagogies which reinforce dominant discourses. On a number of occasions, students in the focus groups suggest actions or words which reinforce discourses that young women are not as
athlete and capable as young men. The students also comment about the pressure young men might encounter if their physical capabilities do not measure up to their peers.’

*Ashley:* In elementary school, when we’d play dodgeball and stuff, the teachers would always like split up the boys first and make sure like there were strong boys on each side and then would do the girls...In my co-op last semester, she [the teacher] made sure there was like boys on both teams and then she would be like okay, now the girls don’t really matter so they can go wherever they want.

*Jeff:* The guys who are better athletes get more attention [from teachers] and there is a bit of favouritism from the teachers towards the guys who play sports. It puts pressure on you.

These pedagogical practices require the young men to demonstrate their “maleness” and assume “natural ability” by excelling at sports to gain the attention of their teachers and respect of their peers. Young men who fail to do so risk social consequences and may be classified similar to young women. This may cause some young men to not actively participate or even withdraw from health and physical education.

**Updates in Ontario’s Health and Physical Education Policy**

Since the inception of this study, the Ontario government has released new health and physical education policy. Ontario’s most recent health and physical education curriculum was implemented in September 2015 as an update from the previous curriculum implemented in 1998 (Do, 2015; Ministry of Education, 2015b). A previous attempt to modify the curriculum occurred in 2010 but was withdrawn due to objections over the controversial content (Leslie, 2014). The release of the new 2015 curriculum has raised controversy because of further objections from some parents and religious groups due to the sexual health education components. Upon announcement of its release, parents staged protests, held rallies, and withdrew their children from schools in response across the province (Jeffords, 2015; Kula, 2015). Media polls suggest one in six parents have considered pulling their child out of school to avoid exposure to the new curriculum (Csanady, 2016). The most significant and controversial changes to the health and physical education curriculum occurred within the healthy living strand to reflect “health, safety and well-being realities faced by today’s students. Updates to the curriculum include healthy relationships, consent, mental health, online safety and the risks of ‘sexting’” (Ministry of Education, 2015b). Through the release of the new curriculum, there was a shift in moral panic in the eyes of the public from obesity to sexuality. The outcry from the public (re)produces messages that young people are risky subjects and need to be protected. This extends the
messages that young people need their bodies disciplined through physical activity, eating
behaviours monitored through limited food choices in the cafeteria, and unable to be responsible
for their own sexuality. Support for the new curriculum has come from health and physical
educators as well as public health organizations (Ministry of Education, 2015b). “The Ontario
Public Health Association welcomes the release of this new Health and Physical Education
Curriculum….The new curriculum will help students gain vital knowledge and skills and lay the
ground work for their lifelong health and well-being” (Larry Stinson, president, Ontario Public
Health Association, as cited in Ministry of Education 2015b). Chris Markham, executive director
and CEO of Ontario Physical and Heath Education Association claims, “the curriculum focuses
on skills and strategies that can be transferred from the context of the classroom to healthy,
active living outside of the school” (as cited in Ministry of Education, 2015b). Very few changes
have been made to the active living or movement competence strands of the curriculum, which
focus on participation and movement skills.

The most recent curriculum document is more comprehensive and detailed than the
previous edition. For example, teachers are provided with information about lesson design,
instructional approaches, accommodations, et cetera (Ministry of Education, 2015a). Additionally, the previous curriculum documents did not provide any information about
coeducational or same-sex classes, nor did they state differences between the delivery of health
and physical education to young men or women (Ministry of Education, 1999a, 1999b). The
latest curriculum states:

Although all the curriculum expectations can be achieved in either co-educational or same-
sex classes, addressing parts of the curriculum in same-sex settings may allow students to
learn and ask questions with greater comfort. Same-sex settings may be of benefit to some
students not only for the discussion of some health topics, but also for the developing and
practising some physical skills…. When planning instruction and considering class
groupings, teachers should be aware of and consider the needs of students who may not
identify as “male” or “female”, who are transgender, or who are gender-non-conforming.
(Ministry of Education, 2015a, p. 60)

The most recent curriculum document suggests there may be some instances where
coeeducational or same-sex classes might be beneficial; however, there are still no specific
curriculum distinctions made between the delivery of the curriculum material or expectations for
young men and women.
The previous curriculum did not specify the activities that are required of students to demonstrate the curriculum expectations. The skills for the above expectation could be accomplished through a game of low organization (GLO) or a particular sport. The most recent version curriculum maintains the neutral language but provides suggestions and examples of potential activities for the classroom teachers to understand how the curriculum expectation can be accomplished. For example, Grade 9 students need to:

- perform locomotor and manipulation skills in combination in a variety of physical activities while responding to external stimuli (e.g., send a rock, using an appropriate amount of force, to remove the opposing team’s rock in curling; move body into position to retain possession in ultimate disc while evading defenders. (Ministry of Education, 2015a, p. 98)

The new curriculum document is not explicit in stating that differences between young men’s and women’s health and physical education classes should be established. Rather, the interpretation may still vary across schools and within schools. This research illuminates pedagogical practices, gendered, and healthism discourses mediating the physical culture of schools and how this further reinforces and entangles sex and gender. It remains to be seen if these changes in curriculum will result in cultural shifts towards a more inclusive curriculum implementation. As with previous curricula, the new curriculum is still open to the interpretation and pedagogical practices of the teacher.

**Chapter Conclusion and Recommendations**

The Ontario Health and Physical Education curriculum (Ministry of Education, 1999a, 1999b, 2015a) does not outline specific activities or accommodations that should be provided for young men or young women as two separate categories. The types of activities and accommodations are left open to interpretation by the classroom teacher to create an engaging classroom environment. The engagement in physical activity or physical education classes cannot be divided by young men and women but perhaps by the level of internalized competence within the situation or experience with that physical activity (Redelius, 2004). The disinterested behaviours of young men or women should not be confused with their lack of interest in physical activity. Rather, the types of physical activity opportunities provided to young men or women may not be of interest for some particular young men or women and as a result they choose not to fully engage. One’s preference for a particular sport or physical activity cannot be attributed to a binary division between young men and women. Rather, there are many biological and social
influences that contribute to preferences and that cannot be discounted. The opportunities for young men and women in this school may be based on biological assumptions about physical activity preference or assumptions about hormones and the need to be aggressive or physical. Discourses emphasizing the differences between young men and women as “natural” creates a façade that biological sex reflects gender and the categories of male and female are one dimension rather than being fluid, contextual, and falling within a continuum (Gutterman, 1994). This may result in young men and women embodying their gender role to try to fit in by participating or not in the opportunities presented to them. Some young men and women may want to defy dominant gender roles and participate in activities which may not be seen as gender appropriate, but the opportunities are not available. This understanding of “natural” differences has been used in the deployment of health and physical education since the early implemented and adoption of Ryerson’s (1865) curriculum into Ontario schools. Even though the staff and students rationalize differences between young men and women using the term, it creates tension for those who do not embody these biological differences or social behaviours. Although “natural” may refer to hormones, genetic material, et cetera, the participants do not offer a clear definition of this term and the emphasis of these differences using “natural” as a reason for differences in curriculum implementation, may leave some individuals within those classes as feeling “unnatural.”

Part of the teacher certification program in Ontario requires teachers to complete practical placements, which pair an experienced teacher with the student teacher candidate. These experienced teachers mentor and have influence on the teacher candidates prior to the student teachers starting their own teaching careers. As a result, new teachers learn gendered beliefs, pedagogies, which in turn are legitimised, passed on and practiced. Health and physical education classes which emphasize sports and athletic ability tend to marginalize young men who do not have those interests or the genetic dispositions required for the speed, strength, or fitness required for some sports (Tischler & McCaughtry, 2011). Designing a health and physical education class which also incorporate other types of physical activities outside of sport could support other types of masculinity and provide an environment for young men who have other strengths such as creativity, leadership, aesthetics, or problem solving (Gard, 2001, 2003, 2008; Humberstone, 1990, 1995; Tischler & McCaughtry, 2011).
Health and physical education classes which emphasize games, stress modification in rules, and lack opportunities for young women to try sports impact the young women’s abilities and ideas about appropriate participation. As a result, these young women do not consider themselves athletes and often do not take the risk to participate or put forth much effort in physical activity. Health and physical education classes are an opportunity for young women to develop skills and gain exposure to sports in a safer space. The exposure may spur interest in some young women to continue participation outside the classroom. The school environment could be an environment that allows experimentation by young men and women with different physical activities.

Sports that do not focus on physical size could be offered; some boys within the focus groups spoke about their limited skills in traditional sports and their desire to participate in nontraditional physical education activities such as yoga or biking as an alternative. If a larger variety of physical activities were provided to the young men, it might remove emphasis on physical size and presence. It would also remove some pressure some young men may have when their skills may not be as developed as their peers’.

The health and physical education policies governing classes and pedagogical practices employed by the teachers in the implementation of the policies impacts the types of experiences of the young men and women within the classes. The biological understanding of the teachers and students results in gendered behaviours that in turn reinforce the biological understandings of both the teachers and students. The young women receive biopedagogical messages about monitoring and disciplining their bodies to achieve the desired thin body type. The young women feel pressure to discipline their bodies within the confines of their heteronormative feminine images. This shackles young women in this study to restrict their physicality within health and physical education classes as a mechanism of assimilation. The pedagogical practices of the teachers to modify rules, equipment, or activities does not encourage the young women to push themselves physically, which becomes in part a self-fulfilling prophecy: The young women are not or do not see the need or are not encouraged to challenge themselves. Conversely, the young men are required to discipline their bodies utilizing hegemonic masculine methods to achieve the muscular body. The young men are compelled to participate in sports and exhibit enjoyment regardless of interest or they risk social consequences from their peers or teachers. Young men who have no interest in disciplining their bodies in the methods prescribed by health and physical
education classes will demit. This has the opposite effect on the desired outcome of health and physical education classes, as these young men may not engage in any physical activity on a regular basis as a result.
CHAPTER 6: EXPECTATIONS AND EVALUATIONS

This chapter presents how the mechanisms in biopedagogical instructions are incorporated into the health and physical education experiences of young men and women and through the lens of sex, gender, and their intersections. The intersubjective and intrasubjective implications ascribed to health and physical education expectations and evaluations are illuminated in this chapter. Deeply ingrained convictions of sex and gender established in the space of health and physical education (re)produce sex and gender binaries while establishing expectable or desirable physical activity performances. Policy analysis, focus groups with students, and interviews with key informants are utilized to shed light on the expectations and evaluations attributed to participation and engagement in health and physical education classes within Ontario secondary schools.

The chapter begins with an introduction to the establishment of expectations along with the assessment and evaluation of health and physical education curriculum within Canada and specifically within the province of Ontario. The expectations and evaluations of students are established by Ontario and implemented by the classroom teacher; however, these are informed or influenced by the culture of the school.

An achievement chart is provided to teachers within the Ontario Health and Physical Education Curriculum (Ministry of Education, 1999a, 1999b, 2015a) to institute a formal evaluation. This achievement chart first appeared as an assessment and evaluation tool for teachers in the 1999 Health and Physical Education Curriculum and was republished in the most recent version (Ministry of Education, 1999a, 1999b, 2015a). According to formal government documents, the achievement chart is intended to be a guide for teachers to assess students’ achievement, provide descriptive feedback, plan assessment strategies, and assign final grades (Ministry of Education, 1999a, 1999b, 2015a). By the government of Ontario’s own admission, it is reflective of a movement towards more accountability in the assessments and evaluations in Ontario schools (Ministry of Education, 2000, 2010a; Volante, 2007). Course achievement is broken down into four levels (level one being the lowest level of achievement and level four being the highest) and four different categories of evaluation, including: (i) knowledge/understanding; (ii) thinking/inquiry; (iii) communication; and (iv) application. Suggestions and guidelines for each area are stated in the curriculum document. The same
achievement chart is provided for all secondary health and physical education classes. The most recent curriculum states,

> a student’s achievement of the overall expectations is evaluated on the basis of his or her achievement of related specific expectations. The overall expectations are broad in nature, and the specific expectations define the particular content or scope of the knowledge and skills referred to in the overall expectations. Teachers will use their professional judgement to determine which specific expectations should be used to evaluate achievement of the overall expectations, and which ones will be accounted for in instruction and assessment but not necessarily evaluated. (Ministry of Education, 2015a, p. 48)

The interpretation of the level of achievement of each student in each category is at the discretion of the classroom teacher. As a result, differences in expectations and evaluations can emphasize intersubjectively between students in a class and intrasubjectively within students depending on their own physical literacy or ability for each physical activity they encounter in the schooling process. Hoge and Coladarci (1989) suggest that assessments utilizing teacher judgement have a greater range of validity and a wider range of student results because of the subjective nature of the process. Accordingly, researchers suggest these tools be used cautiously in performance-based assessments because of the modest inter-rater reliability and generalizability (Crehan, 2001; McBee & Barnes, 1998). Although it is not mandatory for teachers in Ontario to use the achievement chart prescriptively, it is considered by the Ministry of Education to be the provincial standard for health and physical education within the province of Ontario (Ministry of Education, 2010a).

Formative and summative evaluations are currently used within the classroom to assess whether or not students have achieved a passing level in the achievement chart.¹ In most health and physical education classes, all students engage in the same activities or perform the same skills, which allows for classification and differentiation of the students’ abilities. Foucault’s (1977) and Gerdin’s (2012) contentions that evaluations can be considered disciplinary techniques which combine normalizing judgement to classify students and hierarchical observation to compare students has been observed in this case study.

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¹ Although the achievement chart in the health and physical education curriculum is an official evaluative tool, organizations such as Ontario Physical Health Education Association (OPHEA) have created rubrics, unit plans, lessons, and exemplars for teachers (OPHEA, 2000a, 2000b).
Students are constantly under an evaluative gaze of other students as well as teachers. The gaze of teachers is evaluative, which contributes to power differentials between students and their teachers. Since individuals interact with each other with at least some expectation as to how they will engage, perform, or act (Miller & Turnbull, 1986), teachers interact with students based on past practices and experiences. Teachers are not immune to developing behaviour or performance expectations based on past experiences or broader society (Brophy, 1983; Brophy & Good, 1974). Health and physical education teachers interact more with young men and are more likely to encourage them to be involved in sports (Cann, 1991; Duffy, Warren, & Walsh, 2001; Macdonald, 1990). The increased number of interactions might contribute to more positive expectations or judgements of young men and their abilities (Chalabaev, Sarrazin, & Fontayne, 2009). Observations of these favoured interactions by young women may reinforce assumptions around abilities and appropriateness of health and physical education for them.

In Western culture, young men’s social and cultural development is considered by many to be based on values attributed to sports (Connell, 1990, 1995; Hayward & Mac an Ghaill, 1996; Kidd, 2013; Swain, 2000; Whitson, 1990). Although sports scholars have suggested there has been a shift in acceptance of broader gender performances, engaging in and excelling at sports is still expected of young men, as participation may be considered a rite of passage (Connell, 1990; Jarvis, 2015; Magrath, Anderson, & Roberts, 2015; Messner, 1992; Pringle & Markula, 2005). Disciplining the body through sports creates a normalized practice for young men to reproduce a narrow range of heteronormative masculinities (Gerdin & Larsson, 2017). Although, young men are now able to engage in a broader range of behaviours without damaging their masculinity (McCormack, 2012), the behaviour expectations of young men within secondary school is found in this study to be reproduced within the environment. Young men who do not participate in the practice of disciplining their bodies through sports within the school environment or broader society are marginalized for their unwillingness to engage in a primary site for the social construction of masculinity and lose social capital among their peers (Davison, 2000; Whitson, 1990). If a school’s culture establishes expectations about young men’s embodiment of sports, those who do not embody the social expectation of athletic excellence or physical competence may be ridiculed for their masculine failures and may feel awkward and unskilled (Gard & Meyenn, 2000; Swain, 2000). Failing to meet the expectations of the school’s culture may cause
some young men to distance themselves from all forms of physical activity to prevent their masculinity from being challenged.

Young women experience lower societal and parental expectation to participate in or put forth effort in physical activity, nor are they encouraged to be physically active (Fredricks & Eccles, 2005). Earlier research uncovered a trend that young women feel less competent and do not place as much value on sport than young men (Fredricks & Eccles, 2005) which continues today according to Slater & Tiggemann (2011). Despite evidence to the contrary, young men are always considered more physically competent than young women (Biddle, Atkin, Cavill, & Foster, 2011; Bletsou, Gerodimos, & Pollatou, 2006). As a result, young women may distance themselves from physical activity and pursue other interests, while young men who do meet societal and parental expectations may also put distance between themselves and organized physical activity. This withdrawal from participation by young men and young women may have lifelong implications because of the positive health effects of exercise (Drummond, 2003).

Experiences and expectations influence a teacher’s evaluation of a student. As young adults, health and physical education teachers tend not to have experienced difficulty with physical tasks because of their own high levels of physical competence. Physical education teachers often pursue the career because of their own success within the field (Hopper & Sanford, 2006). Consequently, teachers may tend not to understand why a student is unable to meet expectations. This is particularly true for young men. Tinning (1985) suggests physical education teachers whose own participation in sports was unproblematic throughout their lives have limited empathy towards individuals who have not developed the same physical competence. Accommodating young men who struggle with physical activity may not be seen as a requirement of being a competent teacher (Tischler, 2014). Subsequently, young men with lower levels of physical skills may not have developed a strong rapport with their teachers (Drummond, 2003). This disconnection contributes to students failing to meet the teacher’s expectations.

The remainder of the chapter outlines the divergence in expectations between young men and women within the school environment as a result of biological assumptions, ensuing social behaviours, and dominant culture. The divergence is made evident through interactions with peers and teachers, academic achievements within health and physical education classes, and the school culture and climate. The subsequent section explores the differences in expectations of
teachers and peers towards young men and women in health and physical education class. Next in the chapter, young men and women discuss the elusion of academic success and declining enrolment. The conclusion of the chapter focuses on the broader athletic culture of the school and the differences in cross-curricular rules established by the provincial governing body.

**Great Expectations**

The current structure of most Grade 9 and 10 health and physical education classes within Ontario secondary schools segregates young men and women into different classes based solely on their biological sex. Although there are some exceptions in these intermediate classes, it isn’t until senior grades that mixed-sex courses are common. Consequently, this segregation early in the secondary school creates additional partitions between young men and women. At an essentializing level, this institutionalized organization reproduces discourses about a natural biological divide between young males and females. The binary classes, as C. West and Zimmerman (2002) argue, “sustain, reproduce and render legitimate the institutional arrangements that are based on sex categories” (p. 22). As discussed in the previous chapter and further expanded on in findings of previous research, (Chepyator-Thomson & Ennis, 1997; Satina et al., 1998; Scraton, 1986; Wright, 1995), differences in activities between young men’s and women’s classes, privilege young men’s sporting knowledge and experience, perpetuate ideas that participation in sports is “unfeminine” for young men, and contribute to biological and sexist assumptions about ability. Consequently, differences in the structure of the classes and delivery of curriculum create distinctions in the expectations of young men and women.

Within the student focus groups, participants address differences in their peers’ and teachers’ expectations for young men and women within health and physical education classes. Young women in the focus groups describe their performance expectations being lower for young woman compared to young men, while some young men express frustration because they are expected to demonstrate higher levels of athletic competence regardless of their present abilities.

*Question:* Kaitlin, you mentioned teachers don’t have the same expectations for you. What did you mean by that?

*Kaitlin:* Teachers have lower expectations for us [young women] and they don’t expect us to be very good. Like if you can’t do something like throw a ball or something, that’s ok because you’re a girl so it’s fine.
Luke: I’m not the most fit or athletic person so it doesn’t really help me [meet expectations], you get the bias of the gym teachers who think I should be better.

Hannah: I know that it’s a proven, scientific fact that guys are born with more muscle mass… they are stronger and better at stuff [sports].

Daniel: People can’t pretend that there’s no difference like it’s just there. You can’t like put a carpet over it. Guys are genetically stronger than girls. It’s true for the most part.

The students’ comments in the focus groups reproduce an understanding that the lower expectations for young women exist because of underlying assumptions that all young women are not biologically as strong or physically capable as young men. In turn, the higher expectations for young men reproduce assumptions that all young men are physically strong and excel at athletics. This understanding that young women are the weaker sex and that young men should excel at physical tasks impacts the students’ and teachers’ expectations about ability and behaviours of both young men and women within health and physical education classes.

While in the weight room during class activities, young women declare there is a lack of drive to physically challenge their bodies while lifting weights in order to maintain societal expectations of achieving a slender, feminine physique and not gain a lot of muscle mass, as the Western ideal image would prohibit. Some young men in the focus group believe the young women do not lift weights because, by societal standards, it is not an activity they are permitted to engage in.

**Question:** Samantha, you mentioned that you don’t like to lift weights; why is that?

Samantha: I wouldn’t want them [muscles] to be bigger than some guys because that brings in a whole new reason for them to make fun of you for something and now look like one of them but you can’t act like one of them and it’s just, then they’ll come up with something else.

**Question:** Does anyone encourage you, as a young woman, to lift weights?

Ashley: Well we [young women] will sometimes lift weights, nothing big, but we mostly just sit on the bikes and kinda pedal because it doesn’t matter, no one cares.

Laura: In the weight room we [young women] did modified things like push-ups. We’re allowed to do the modified push-ups where I feel like we shouldn’t be able to because it kinda putting us lower than the guys.

Adam: Well maybe girls don’t lift weight because society has driven us to believe is like the complete opposite of what females should be.
Samantha’s comment echoes a dominant Western culture expectation that women’s bodies should have muscular tone but not muscular size or bulk because those qualities historically symbolize masculinity and its strength and size (Bordo, 1990; Choi, 2000; Krane et al., 2004). Some of the young women also suggest they do not put forth any effort in the weight room because they do not feel expectations from their teachers or peers. Young women also declare the absence or limited physical fitness expectations or goals of their own because their teachers or peers do not expect it of them. Teachers’ lower expectations and limited encouragement of the young women to challenge their physicality reinforce the traditional view that male athletes are the “real” athletes; this lowers the young women’s own expectations of themselves in this study. Again, the lower societal expectations of the young women are based on deep-rooted biological assumptions about the young women’s physicality (Birke & Vines, 1987). Moreover, the young women’s understandings of these expectations are reflected in their behaviours within the class, as will be examined in this chapter.

The conversations by the young men and women in the focus groups reveal their understandings and assumptions about the stereotype that young men all have a “natural ability” to play sport. As a result, young women are expected to perform and engage in a certain range of manners within health and physical education class (e.g., doing cardio instead of lifting weights). Along with expected performances such as socializing with peers, there are associated expectations and behaviours for young men. Young men who fail to meet these expected performances encounter social exclusion by their peers through teasing or not being passed the ball. Some young men face criticism if they do not meet the expectation of excelling at traditional sports, resulting in a decrease in self-confidence.

*Question*: What happens when young men are not as good as their peers?

*Adam*: I’ve seen it a couple times where some of the more athletic guys will sort of exclude the less athletic people, such as in basketball. They won’t pass to the less athletically inclined.

*Henry*: there’s just a few guys in our gym class I guess they are almost like made fun of just ‘cause they weren’t like I don’t know as skilled but like still participated and you could see that they would get down on themselves just ‘cause everyone was like chirping them and stuff.
For young men, participating without excelling at the sport is often seen as a failure to their peers as well as their teacher. By failing to meet the expectations of others, some young men endure gender policing, under the guise of teasing, by their peers as well as their teachers.

*Question:* What happens when you or your classmates might not be the best athlete in the class?

*Alex:* I had like quite a group of guys in my Grade 10 class and they would like chirp [tease] each other. They were just being guys and Mr. Carlton [HPE teacher] would like kinda chirp on them but would then be like okay knock it off and Ms. Black [HPE teacher] doesn’t really chirp but doesn’t say anything.

*Adam:* Ya, not all teachers chirp but they do participate in terms that they let it go on. They may not be openly chirping the guy but they’re letting it go on.

*Alex:* It’s to get under your skin, more fire under the person to push yourself.

*Question:* Does that bother you?

*Ben:* Well yeah, I know when I’m not the best guy out there but I don’t need to be reminded of it.

Although some of the young men claim to not be bothered by the comments of their peers or found it to be motivating, other students were frustrated because it constitutes public and verbal acknowledgement that they are failing to meet their teacher’s or peers’ expectations of their masculinity. This teasing or “chirping” may be considered part of the everyday hyper-masculinities banter that occurs between the peers. This gender policing reinforces stereotypes about appropriate behaviours for young men and provides incentives for young men to ‘fall in line’ with the behaviours or risk social consequences. The teachers support the practice by contributing to the teasing. The teachers’ actions are not only unprofessional, but their actions reinforce the behaviours of the young men’s peers and establish an unsafe and uninviting environment for the young men who do not embody the masculine expectations. By failing to meet the expected social expectations based on biological assumptions, the young men make decisions to withdraw themselves from physical activity or health and physical education in an effort to avoid these evaluative gazes.
Making the Grade and Incorporating the Curriculum in Health and Physical Education

In Ontario secondary schools, there has been a decline in the number of students, especially young women, enrolling in physical education beyond the mandatory Grade 9 course (Faulkner et al., 2007). Within this study’s board, this trend of declining enrolment continues.

*Question:* How many students stay enrolled in physical education throughout secondary school?

*Jennifer (school board staff):* The specific number will vary depending on the year or cohort but overall there is a decline in the enrolment for all students but there are more girls that drop out than boys. There is a steady decline and by Grade 12, girls make up less than a third of students enrolled in phys ed.

For the particular secondary school in this study, teachers address the challenges they face to get young women to enrol in health and physical education beyond the mandatory Grade 9 course. All of the teachers suggest that health and physical education may not be considered a priority for young women, or the current design or structure of the course is considered intimidating, especially in senior grades. Health and physical education teachers discuss the challenges of retaining young women in health and physical education.

*Question:* What happens to enrolment in health and physical education after Grade 9? Is there a difference for young men and women?

*Victoria:* Generally, the number of phys ed sections decrease after Grade 10 because they don’t have to take it anymore. There are more boys who take phys ed than girls in senior classes.

*Question:* What are your thoughts on the decrease in the enrolment in health and physical education, especially for young women, in senior grades?

*Victoria:* Lots of these girls at this school will go to postsecondary education, which means they don’t have enough room in their schedule. Often by the time Grade 12 comes they’d rather take a spare ‘cause they’d rather work instead of work out. So I don’t know what the situation is in other schools, if it’s the same case, but some of lots of girls classes and we have eight girls. Like excluding the outdoor ed. Like just regular phys ed classes. I’m gonna say there’s probably eight girls. So obviously something seems to be happening.

*Laura:* The girls that are taking the Grade 12 course tend to go to either outdoor activities, if they’re in Grade 12, not as many there but maybe fitness, which is a clientele that is more disciplined and driven academically than the open level.
Ann: The fitness course we currently have too is incredibly intimidating for a lot of girls that would take another type of fitness class if we offered it.

Jenn: Victoria [female colleague] who tried to get that going, like to her credit, tried to get it going for a few years, but the [department head] never wanted to do it and now [other teachers] are worried that it’s going to take away from his fitness class so he doesn’t really wanna do it. So she managed to get a 11–12 kinda fitness split for next year…. So there’s not really a lot of support to change the course for girls and I don’t even know, maybe if you offered something maybe it’s not going to work. Like maybe they really are geared toward something else and they don’t wanna take it, I don’t know, but the option isn’t even there.

Question: Are you able to design a course that the young women might be interested in?

Ann: You have to fit into the Ministry guidelines too so it’s you know, you might want to offer something but does it fit the curriculum?

The Health and Physical Education Curriculum (2015) outlines open level courses, which can be offered at each grade for everyone (Ministry of Education, 2015a). Focus courses can be designed by a school to focus on a particular group of physical activities such as aquatic activities or rhythm and movement activities. The limited enrolment by young women within this school and others is assumed by the teacher to be because of the limited interest in the types of courses offered. The teachers express frustration about the limitations they experience when designing a course in addition to the lack of support they may receive from the school’s administration or school board. Within this school, the only “focus course” available to both young men and women is a “personal fitness” course which focuses on weightlifting and cardiovascular conditioning. In the broader school board, there are still a limited number of focus courses available to students with speciality subject area primarily dedicated to personal fitness or a specific team sport such as hockey or rugby.

Young women’s demission from health and physical education reflects broader social or cultural issues such as limited opportunities or role models (Brake, 2010). The young men and women in the focus group suggest young women are encouraged to focus on their school studies because there are limited professional athlete opportunities for young women in sport and compared to males athletics, thus fewer role models for young women.

Question: Why do young women drop out of health and physical education classes?
Ben: I think they’re [young women] most focused on education then like phys ed because they know they’re not gonna like get, they don’t have a future in like sports ‘cause they’re not good at it or they’re not good enough.

Brad: And like all the little kids who wanna grow up and play on the NHL teams or whatever, they [young women] don't really get there because there isn’t anything for them.

Robert: We just had the women's world cup of hockey and I think I was like the only person in our school who actually paid attention to it and watched the games.

Brian: It's like even in just like in ESPN or whatever like you never really see as much women's soccer as guys’.

Robert: Yeah on TV as well. Its reflective of society, the only real time you hear about it is like at the Olympics.

Ben: Yeah and they're like separate channels and they're a lot smaller or whatever.

Brad: Yeah unless it's like gymnastics or figure skating or whatever. Then there is lots.

Jeff: Yeah it's the same stuff, there is not a lot shown of professional athletes who are women. It would bring out of a woman if it was like on TV and stuff. Like when you see, there's like leagues for like basketball, like professional basketball for women but you never hear about it. All you hear about is like the NBA.

With the limited opportunities as professional athletes, young women tend to focus on their academic success.

Question: The young men have given a number of suggestions as to why young women might drop out of physical education; would any of the young women want to add to that?

Charlotte: I feel girls quit because if they're not good at it they feel like they won't do good if they continue it doesn’t get them anywhere.

Samantha: I don’t need it [health and physical education class] for what I want to do.

The young women do not envision the long-term importance of participating in health and physical education class and may choose to pursue more academic interests where they may be more successful and which parents deem more valuable, such as mathematics or business.

Young women are encouraged to focus on their academic accomplishments more than young men are, who are encouraged to pursue athletic accomplishments. Young women who do
not excel at traditional sports demit from health and physical education because they feel it is too
difficult to obtain high marks.

*Question:* When making your course selections, why is physical education not one of your
selections?

*Katrina:* I find it hard to get good marks and I don’t do as well in phys ed so I need to
focus on my other courses.

*Ann:* Ya, like I know what I need to do to do well in something like English or math but I
don’t know what I need to do in phys ed to get high marks.

*Katherine:* I don’t think it is like that. I find that teachers have low expectations so we get
better grades when we actually just go out there ‘cause most of us aren’t skilled. Some of
us are and go over and above but so they have lower expectations that all you have to do is
try and participate. Maybe it’s different if you are good at something, then they might
actually care how good you are.

These comments from the young women in the focus group are similar to the results of Dwyer et
al. (2006), when conducting interviews with young women about barriers to physical activity
found young women were being encouraged by their parents to do their homework and excel at
school rather than participate in physical activity. In this study, a majority of the young women
feel they must look for success in other areas because they cannot accomplish success in physical
activity settings. The marks assigned by the teachers to the students are meritocratically based. If
students do not believe they have the ability or talent for success for the meritocratic fodder, they
tend to demit from the subject area.

*Question:* Is it easy to get good marks in physical education class?

*Katrina:* I try hard too but don’t get good marks. I just don’t know what to do to get good
marks. In math I just have to study and do well on a test but in phys ed its harder, you can’t
study so its hard to know what to do to get good marks. So I’m better to do something
else.

When teachers discuss students’ comments concerning the difficulty they have in
achieving high marks, there are disconnects between student and teacher understandings.

*Question:* The young women in the focus groups spoke about how it was difficult for them
to achieve high marks in physical education. Do you know why they would feel that way?

*Scott (teacher):* I don’t know why they feel this way. We’ve made it so the nonathlete can
get a level three or level four just by demonstrating skill improvements.
Despite these changes and efforts considered to be in place by the teachers to grade on skill improvement rather than skill performance, the young women challenge their teachers’ evaluations as maintaining a meritocratic foundation. This decreases young women’s intrinsic impressions of being successful in health and physical education class. As Hay and Macdonald (2008) first suggest, student achievement or grades are symbolic of scholastic quality and success. Grades provide an opportunity to compare students, with higher grades symbolizing mastery of a subject and the creation of a hierarchy among students. An unintended consequence of the movement towards the merging of assessment and accountability is that, in an attempt to legitimize and provide validity to a performance-based assessment, the teachers may be more critical of students (Rink & Mitchell, 2002). The assessment of students in health and physical education classes are made by subjective evaluations and conclusions on the part of the teacher. When teachers have personally internalized their own sets of criteria that align with the standards of the achievement chart provided in the health and physical education curriculum, evaluations have some semblance of the outlined criteria. However, teachers’ criteria can be aggrandized by teachers’ beliefs, values, expectations, and the subject (Hay & Macdonald, 2008). This results in heightening the achievement of some students while marginalizing others whose performance within the class does not align with the teacher’s criterion. The students in the focus group suggest that they are unable to achieve high marks if they do not perform the ways their teachers expect.

Adam: With gym in Grade 9 and 10 the summatives [evaluations] were so, they were pretty stupid. Like you got your mark is suppose to be based on how well you participated and like in some ways that was good but obviously the people that were like better like got really good marks because they were able to participate and are the better athletes so like take over the game and were better athletes.

The study’s school also has a decrease in enrolment for young men after the mandatory Grade 9 course. Health and physical education classes appeal to some young men because they are considered to be less academically demanding courses due to an assumed lower course work requirement. Other young men in the focus group found it difficult to determine how they are being evaluated or how they can achieve their ideal level of academic success, which cause these young men to demit from health and physical education in senior grades when grades such as math and science are deemed to be more important for admission to postsecondary education.
**Lloyd:** When guys think of it [health and physical education] it’s like oh a, uh a class like, a credit without taking an exam. Like let’s sign up on that one. It’s like gym, oh okay that’s an easy one. It’s like the relaxing part, especially in my semester. I have English, French, science and gym so it’s kinda like a relaxed one where you kinda like you’re not worried so much about marks and like tests and stuff. It’s like a bit more, it’s a bit easier.

**Brian:** I never know how I’m being marked and the most I ever get is a 80 and that’s not good enough for university.

The concerns about entrance into a postsecondary institution prevent some young men from participating in health and physical education courses because they do not think they will be successful.

The lack of interest in the types of courses offered for young men is also suggested by teachers as being the key reason for the decline in their enrolment.

**Question:** The focus on declining enrolment in physical education is usually on young women demitting but it also happens with young men. Why do you think there is a decrease in enrolment for young men once physical education stops being mandatory?

**William (teacher):** In terms of Grade 10, 11, 12, we lose the kids that aren’t as serious about sports because our classes tend to be about sports, and not about games and activity, and just being overall mobile.

The focus on the competitive nature of the sport does not meet the needs of all the young men. The young men convey negative experiences in health and physical education and the need to change the traditional sport focus to a program that would meet the interests of all young men.

**Question:** What would you change about health and physical education?

**Adam:** Well like guys are supposed to be naturally aggressive and like the classes and the classes are suppose to reflect society with all the sports and stuff but that isn’t always true for everyone. Like its true men are just generally bigger statistic wise and average wise and are suppose to be agile, faster and muscular but not everyone is like that.

**Evan:** You need to completely destroy the mainstream. I mean look at like class numbers, right? They just exponentially go down as you go up the grades.

**Robert:** Like one Grade 9 kind of course as you have sort of like a basic course, you have your basic gym and the maybe like an outdoor ed and then something else, right? Just more variety, because I mean right away so many kids from then on maybe have a bad experience in Grade 9 and then they never do it again.
The traditional and current health and physical education program (geared towards a focus on sports for young men) is partially due to physical activity being historically considered to be a necessary outlet for young men’s biological needs to be aggressive and competitive. However, current types of course design and pedagogy do not meet the needs of all young men when this assumption is used by school and school board staff to design a health and physical education program. Instead of designing courses and utilizing inclusive pedagogy to create inviting opportunities for all students to engage in physical activity, the current system creates a range of subordinate masculinities for the young men who do not engage in the dominant range of masculine behaviours (Connell, 1995). The hidden curriculum described by Kirk (1992b) suggests an underbelly discussion is delivered through particular pedagogical practices and activities in classes. These reinforce norms, rules, conventions, and identities expected to be demonstrated by young men. Activities focusing on physical strength or aggression cause some young men to feel inadequate and fearful of exposing themselves as not “real men” (Rønholt, 2002). In recent years, the differentiation of instruction has been a pedagogical strategy by Ontario’s Ministry of Education for academic subjects such as mathematics and languages (Ministry of Education, 2013). However, differentiation is rarely discussed within health and physical education teaching culture. Creating an environment, which allows for different interests and variations in abilities in health and physical education will allow multiple masculine identities to thrive within the environment. Furthermore, it will allow less emphasis to be placed on the intersubjective nature of physical activity and allow for young men to experiment with new activities without concern about their abilities as intrasubjectivity occurs between activities. Creating this inclusive environment should go beyond the classroom walls and include the extracurricular activities as well.

**Wide World of Sports: Athletics Outside the Classroom**

Traditionally in Western society, men and women have competed in separate sporting events at the professional and amateur levels. Although there are some examples of women excelling at professional and high-performance amateur levels, such as Hayley Wickenheiser, who was the first woman to play full-time professional hockey in a position other than goalie; Ilda Borders, who was one of the first female pitchers in integrated into men’s professional

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2 Organized sport is also a class-based privilege due to the significant costs (e.g. travel, equipment, coaching, et cetera) associated with participating.
baseball; Danica Patrick, who is a professional stock car racing driver, who have played in professional men’s and women’s leagues, the physical abilities of elite female athletes continue to be challenged or questioned. Reasons for the separation of the two groups in sport are often equated to biology, particularly the physical advantages men, as a group, are assured to have over women with respect to power, strength, and size. However, comparisons of physical differences often rely on averages so do not consider women who may be stronger than the average or may have a body type which is beneficial for certain sports (McManus, 2011). Furthermore, the comparisons are often made between males and females based on adult bodies, not adolescent or late adolescent bodies. This glosses over the diverse range of early to late adolescent body differences in secondary school. Due to variations in growth during adolescence, young women may tower over young men, especially in late elementary years (Grades 6 to 8) or early secondary school years (Grades 9 and 10 depending on school boards). By the time young men and women enter secondary school in Grade 9 and participate in their final physical education class, they may not have gone through puberty, which can impact their interactions within the class. This can position some young men and women to be disengaged in health and physical education at an early age.

   Young men and women are often separated into different sports or competition before any biological advantages may exist (McManus, 2011) with no particular reason except misguided assumptions about biology or tradition. When examining swimming data from 1.9 million swims with young men and women between the ages 6 and 19, Conley (2012) found no differences in the swim performances between young men and women until puberty. After puberty, the young men may have more muscle mass than young women, resulting in young men outperforming young women when tasks require more muscle mass. However, not all sports rely on muscle mass alone and, thus, preventing all young men and women from competing against each other might contribute to reinforcing stereotypes and assumptions of significant biological differences. As a result of this early segregation, young men and women are taught that the abilities of different sexes are not held at the same level of esteem. Within Ontario elementary and secondary schools, young men and women continue to compete in separate athletic local and provincial events.³

³ With some exceptions of young women competing on the same team as young men when options for young women are not available.
The Ontario Federation of School Athletic Association (OFSAA) governs all athletics within Ontario secondary schools. OFSAA has a bylaw about gender equity (OFSAA, 2015a). This policy states, “gender equity in school sports is the belief and practice which ensures fair access for female student athletes, coaches, officials and administrators to participate, compete and lead” (OFSAA, 2015a). However, the students within the focus groups suggest that at the school level, things may not be necessarily fair in terms of recognition and access to resources to train and compete on interscholastic varsity teams.

*Question:* Are there differences in the resources available to recognition you receive depending on whether the student athlete is a young man or women?

*Kate:* My friend Megan is on the field hockey team again and like they've had the same uniforms for like God knows how long. Like they're so old and then the boys get the new turf and they get like new uniforms.

*Brian:* I think it's a football thing though too more than anything else. Like I don't think the basketball, like look at the guys' basketball team over the girls' basketball team. It's not a huge difference is it?

*Andrew:* Well when you look at hockey, like the boys' hockey team versus girls', like it was all this year like the guys were like oh "We're going to Europe," "We gotta raise money for Europe" and all this stuff and it was all about the guys going to Europe and yet like the girls' team year after year has always been one of the top teams and there's like no recognition for that.

*Katrina:* Yeah like I'd never hear anything about like if the girls' hockey team. If I didn't know people on it I wouldn't know we even had one.

*Kate:* The guys’ teams, when there’s a championship it’s all, everyone goes to it like the guys’ team especially. We can get the whole afternoon off to go see them and the whole school goes and there’s tickets and everything whereas the girls’ games, they’re just on the announcing and say “Okay you can go if you want to.”

*Ann:* I know the girls' rugby team, the guys' rugby team was allowed to practice on the turf field and we got the field that was all mud and glass and stuff on it. We weren't allowed to practice on it 'cause we would ruin it for the football boys but the guys' rugby team practiced on it every day after school.

*Robert:* There's floodlights for football games for males but you never see like when the girls are playing hockey at like home.

*Brian:* But like field hockey or anything.
Adam: Yeah. You never see like a lot of floodlight games or anything for girls. They're just like a game. But when it's like male people playing they're like oh let's see the game it's gonna be good.

Victoria: They [school staff] get us out of school and like encourage us to go but like if a girls' team is going then there's no school cancelled but go for it.

Question: Does it matter that young men and women athletes might experience differences in terms of treatment?

Robert: I don’t know why they would be treated differently, 'cause when you're at a competitive level and you have to like you have to be good at a sport so you have to be equally good as male and as female.

The students recognize that significant differences in recognition and resources exist between school teams depending on the sex of the participants. Several young men and young women were bothered by the differences and articulated that they did not understand why the inequities exist. In opposition, some suggest the differences were justified.

Question: Are the differences in treatment between young men and women’s sports justified?

Mark: The guys take it [sports] more seriously so that’s why they get more stuff.

Ben: The boys are just better athletes than the girls. They are stronger and need more stuff so they can compete against the other guys [other school teams].

For these students, the differences are fair and justified because of the understood biological differences between the ability of young males and females. However, the differences in the resources allotted and the recognition given within the school environment are reflective of larger social issues. In amateur and professional athletics in Western culture, men have extensive opportunities and disproportionate patterns of remuneration compared to women, (V. Burstyn, 1999; M. Hall, 2002; Heywood & Dworkin, 2003; Theberge, 2000; Thompson & Lewis, 2014). Men’s sports are often deemed to be more exciting to watch and the media invests more resources in production, commentary, and coverage to ensure the spectators’ enjoyment (Cooky, Messner, & Musto, 2015). Furthermore, the media reinforce the notion that gender binaries exist in sport due to biological determinants; this is accomplished by overemphasizing the differences between males and females while deliberately dismissing or ignoring any similarities between men and women that could allow for comparison (M. J. Kane, 1995). Angelini (2008) argues the differences in types of coverage afforded to female athletes reinforce various athletic stereotypes,
particularly that young women are “naturally” inferior. Young women are considered physically inferior as an act of genetics and a natural divide between men and women. Thus, the students’ responses about the fairness of disproportionate allocation of resources may be more reflective of their socialization into societal norms and gendered experiences rather than observation of clear biological differences.

The OFSAA policy about student-athlete participation states, “OFSAA supports student-athlete participation on same-sex teams and encourages equitable programs for girls and boys in co-curricular activities in terms of funding, practice time and facilities. OFSAA will continue to provide equitable opportunities for students in co-curricular activities” (OFSAA, 2015a, p. B43). Despite the gender equity policy, differences exist between some young men’s and women’s sports with no justification for the differences. For example, field hockey and gymnastics are competitions offered to only young women while field lacrosse and American football are offered only to young men. Although OFSAA (2015a) states in their policy that “equity does not necessarily mean that all persons must be treated exactly the same,” (p. B45), there is no justification in the policy as to why different activities are offered to one sex over the other. Although the differences in activities may be an attempt at equity, this policy assumes that young men and women have different interests in athletic events, whereas they might be very aligned. There are also no substantial biologically based reasons for the differences in the sports offered to the students and, in particular, for the exclusion of young women in many sports due to a lack of programming. When a sport is not available for young women, OFSAA’s gender equity policy allows young women to participate on the young men’s team if they are successful at a tryout. Additionally, a 2010 change in the OFFSA Gender Equity Policy allows for young women to play on the same team as young men even if a sport exists for young women (Mick, 2010). The OFFSA Gender Equity Policy states, “where a sport activity is available for a female on a girls’ team, she is eligible to participate on a boys’ team if she demonstrates comparable skill and ability during a successful tryout” (OFSAA, 2015a). This change in policy was a response to court challenges by young women across Canada about being prevented from playing on their schools’ more competitive young men’s teams (Alphonso, 2010; Mick, 2010). The change in

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3 Equality means that individuals are treated the same while equity means all individuals have fair access to social resources while recognizing individuals may have different needs and interests (Kidd & Donnelly, 2000).
policy has been controversial because of concern over young women taking the spot of young men on teams designated for young men (Alphonso, 2010; Grossman, 2010; Mick, 2010; Peters, 2010). However, when this issue is raised in the school or legal system, the perspectives of young women needing to develop a level of resiliency to cope with hypermasculine sporting subcultures is rarely raised. The concerns by teachers, coaches, and other students who oppose changes suggest they do not want the young women disrupting the traditions, rather than the traditions needing to be disrupted.

For sports teams that do not exist for young men, there is no policy for their participation in those sports. These differences reflect societal gendering of sports and the binary participation for young men and women. Young men are not expected to want to participate in feminine sporting events such as gymnastics on female apparatus like the beam, which may be why these sports are not offered to the young men (Agnew, Fane, Drummond, & Henderson, 2017; Hardin & Greer, 2009; Koivula, 2001). While young women are not expected to perform well enough to participate with young men, they nonetheless face criticism when they challenge these expectations (Vu et al., 2006).

For some of the sports that are offered to both young men and women in secondary schools, such as hockey or track and field, differences exist in the rules that govern the sport. Within women’s hockey, for example, more penalties exist for physical contact and fighting is completely banned, yet young men are able to check each other and receive minor penalties for fights (OFSAA, 2016a, 2016b). The students within the focus groups provide commentary on the differences in the rules between the young men’s and women’s teams.

Question: Are there differences in the rules between young men’s and women’s cocurricular sports?

Adam: Everyone that's sort of, that I know really well is in hockey, it's in school and outside of school ball hockey, in girls' hockey there's no contact. You're not allowed to hit people which is, there used to be contact but they took it out 'cause they thought that you know they weren't big enough and strong enough to really hit but when you actually watch women's hockey, there's more contact than there is in guys' and it's, they get way more aggressive.

Robert: Yeah, like when I go to see girls' basketball games it's different 'cause like when I play if I get up in someone's face the ref doesn't really say anything where I've seen girls' games where like a girl can just like look at a girl wrong and she gets in trouble from the ref or the coach and it just seems kinda pointless, like they can't play with same aggression or emotion.
*Question:* As women, do the differences in the rules matter to you?

*Kate:* A lot of people don’t think we are as good because we can’t hit but that’s not our fault we can’t do it.

*Laura:* Yeah like you hear a lot of people saying like oh girls' sports really don't matter and like they're not as good and like they're so boring 'cause there's no physical contact or anything but it's like we would have physical contact if you let us.

These differences are common among women’s sports outside the school environment, where aggressive or physical behaviours are either banned or highly restricted by the referees (Coulomb-Cabagno, Rascle, & Souchon, 2005; Theberge, 1998). By limiting or restricting the aggressive behaviours, the young women feel their sports are not taken seriously or viewed as “real sports.” The participants in this study suggest rule 6a (vii) of the girls hockey regulations (OFSAA, 2016b) prevents them from engaging in sports in the same manner as young men and lower the athletic expectation of others, including male peers, teachers, family, et cetera. M.J. Kane (1995) suggests that narrowing in on evidence about women’s participation in traditional team-oriented, male-identified, aggressive sports “provides empirical evidence that many women can outperform men and also that they can possess physical attributes, such as strength and speed, in greater capacities than do many men” (p. 197). The reasons for the differences in “allowed physicality” are founded in historic assumptions surrounding women’s size, strength, and power (Vertinsky, 1994; Vertinsky & Captain, 1998). The differences in the rules are also a result of inequity in gender issues. Physical culture of the West has clear gendered expectations about appearance and conduct behaviour (Butler, 2004) and appropriateness of certain behaviours and activities for men and women. “Sportswomen must balance some traits essential for athletic success with presentation of an acceptable appearance….They must be mentally strong, yet also portray an image of vulnerability to be perceived as feminine” (Krane, 2001, p. 122). The high levels of physicality in men’s sports continues to be less socially acceptable for women because they challenge the norms and expectations of gendered women’s conduct.

Last, differences between the competitive expectations of young men and women exist in some sports such as cross-country running. OFSAA’s gender equity policy promises, “OFSAA will strive to provide equitable championship opportunities for male and female student-athletes” (OFSAA, 2015a). The equitable championships do not mean the athletes are held to the same
standards. For example, in cross-country running, young women in the midget division (less than 14 years of age by January 1st prior to the start of the school year) are expected to run 3,000m, the same distance as parathletes. Young men in the midget division are expected to run 5,000m. Young women are not expected to run 5,000m until they are in the senior division (less than 19 years of age by January 1st prior to the start of the school year), at which point young men are expected to run 7,000m (OFSAA, 2015b).

Many researchers have examined the infantilization of women athletes’ linguistically in the media (M. Duncan, 2006; Higgs, Weiller, & Martin, 2003; Messner, Duncan, & Jensen, 1993; Wensing & Bruce, 2003). This infantilization often relates to referring to young women as “girls” or using their first names instead of last names when referring to the athletes.

However, the differences in the competitive expectations could also be considered infantilization because there is no biological reason for the young women in the senior division to have a different expectation than the young men in the senior division. This difference in expectation implies young women cannot compete with their male counterparts so accommodations need to be made in the competitive expectations of young women by using the standards of younger men. Some young men and women in the focus group were aware of some differences in the competition expectations and questioned why they were needed.

**Question:** Why do you think there are differences in the competitive standards in your co-curricular activities depending if you are a young man or young woman? For example, Adam, you spoke about the differences in cross-country running.

**Adam:** The different distances, don’t want sense, because if you're talking about endurance, like how long you can run a 4 [kilometers], that's kinda different than talking, like if you're gonna compete girls against girls you can put whatever standards you want. I don't see any reason to make the distance shorter but if you're gonna say compete….If the girls wanna run the 7 kilometres then there's no difference….For field [throwing events] I don't think it's necessary because if you're gonna make the weights all the same, yeah the girls are gonna throw shorter but as long as they're all throwing shorter then it's not a huge deal. I think it's just that they make them smaller so they can kind of at least have a similar distance to what a guy would throw like with a heavier item but just to make the numbers all kinda look the same on paper and stuff but if they want to throw the same weight, there's just gonna be a lot of difference in like results.

Other young men and the young women in the focus groups do not consider the differences necessary, but are not bothered by the differences enough to question them or want change.
When the teachers and program leaders discuss the differences in competitive expectations, they echo the students’ sentiments and are not sure why they exist.

*Question:* After looking through OFFSA’s policies, I noticed for some sports, there are differences in the rules, equipment, competition length, et cetera for young men and women in cocurricular athletics. Is there a reason for it?

*Katherine* (program leader): I’m not really sure why they have different standards. I hadn’t really thought about it. The girls could do it.

*Ashley* (teacher): When guys and girls play the same sport, we’re [girls] stereotyped to be maybe not as fast, not as strong. It’s just kinda like a given but like whereas it could not be the case.

The different expectations result from an underlying assumption that the girls cannot handle the physicality of the longer endurance events or heavier equipment. Young women are “naturally” not supposed to be as powerful, strong, or as athletic as young men. Young women who exhibit physical or athletic excellence can cause a fracture in long-held beliefs about gender roles, patriarchy, and male hegemony (Fink, 2012; Hardin & Greer, 2009; Messner, 2009). The differences in expectations have not been challenged at a school, school board, or provincial level because it risks the disruption to status quo. The differences in competitive expectations are a reproduction of older biological narratives assuming young women are not as physically capable as young men in physical activities and sport. These gendered stereotypes and narratives have not changed because the cultures of school HPE, and community-based sport do not question the expectations.

**Chapter Conclusions and Recommendations**

The expectations of young men and women are influenced by interactions with their peers, teachers interpreting curriculum and achievement rubrics, family, and broader culture. The young women in this study experienced lowered expectations about physical literacy and performance by their peers and teachers because of understandings and assumptions of biological binaries about the young women’s physicality. The young women feel they are not expected to perform well in physical activities because they are not considered to be strong, aggressive, or naturally athletic. In turn, the young women’s behaviour reflects these lower expectations, and they perform gender roles by not putting forward a lot of effort towards physical activity. The young women do not set fitness goals and prioritize socializing with friends instead of engaging
in physical activity because they are not pushed or encouraged to do so by their peers, parents, or teachers. This sets up a self-fulfilling prophesy: If young women believe they are biologically weaker and fail to train for strength, they do become weaker and further the intersubjective gap between young men and women.

For the young men, physical competence and athletic skills are considered to be an expectation due to historic stereotypes of biological assumptions that all young men have a “natural ability” to excel at athletics and possess higher levels of physical literacy; therefore, little consideration is given to the intersubjective variability between young men and intrasubjective variability in different physical activities. Arguably some physical skills are transferable between sports; young men will excel at some particular sports over others. If sports or physical activities primarily done in health and physical education classes are narrow in choice, some young men are disadvantaged. Consequently young men who do not meet these expectations find themselves excluded from participation by their teachers or peers. This in turn may lower their self-confidence as a result of their failure. Consequently, these young men may withdraw themselves from health and physical education to limit their exposure to negative experiences.

The present health and physical education curriculum, course design, and teaching pedagogies in Ontario and knowledge systems do not meet the needs of all young people. The curriculum or types of activities offered to students do not meet the needs of all young men and women. As a result, some students demit from the program. Young women demit from health and physical education because they are encouraged to focus on their academic instead of their athletic pursuits. Other young women lack role models or do not see success in athletics within the broader social context. As a result, these young women may demit from health and physical education because they do not see the importance or value of health and physical education in their future. Several young men and women also demit from physical education because of the difficulty these students have in achieving high grades they require for postsecondary education. These students are unable to meet the physical competency expectations which would result in high grades. As a result, these students enrol in courses which have more clear expectations on how to achieve high grades in courses seen as higher education stepping stones.

Although efforts have been made to signal gender equity within Ontario secondary schools, the policy, pedagogy, and curriculum highlighting clear differences in opportunities and
resources remain for young men and women. Numerous participants in the focus groups were frustrated by the differences which existed in terms of resources, rules, and opportunities between young men’s and women’s teams. Although OFSAA’s policy states that things should be “fair,” this policy may not be translating into reality within Ontario schools. The differences in rules are more of a result of cultural assumptions, not biological “truths” regarding the effects of “natural” or “biological” sex differences between young men and women. Some young men and women were frustrated that these assumptions were being made and they were required to fit within these parameters rather than within their desires or interests. What the teachers or sporting organizations consider to be “natural” differences between young men and women differ from some students understanding of the term. These students did not understand why physical biology was being emphasized and used as a method to separate young men from young women in competition. It is impossible to separate sex and gender when studying the actual embodied physical activity that young men and women experience because they are so deeply entrenched in the understandings and actions of sport organizations, schools, teachers, and youth. The types of activities offered within OFSAA should be offered to both young men and women so that a broader level of personal interests can be met. Differences in expectations or rules should be set only if clear biological differences are determined through rigorous research. This would assist in reconceptualizing young women’s sports as being viewed “second class” to equal or comparable to those of men’s. This would be beneficial to young men and women because it would expand the range of acceptable sports or physical activities for young men. With large sporting competitions such as the Olympics adding mixed gender sports (Mather, 2017), it would be appropriate for the sporting organizations in Ontario schools to move in that direction. The current system and political environment may not be ready for such a radical change so until then, there is a need within the organization to evaluate and reassess the gender policy to determine its effectiveness and implementation within schools.
CHAPTER 7: CONCLUSIONS

Challenging the Intersections of Biology and Society to Change Universalistic Approaches

This qualitative research study assesses the mechanisms of how gender, sex, and their intersection mediate Ontario’s healthy active living and health and physical education policies, curriculum, programs, pedagogical approaches, classes, and extracurricular activities. This study seeks to explore the understandings and experiences of secondary school principals, instructional program leaders, cafeteria workers, teachers, and students in Grades 9 to 12. Combining policy analysis, interviews, and focus groups, I shed light on the implementation and actualization of health and physical education curriculum and the implications these have for young men and women within Ontario secondary schools.

Theoretically informed by the concepts of biopedagogy, sex, and gender, I have contended that sex and gender, along with their intersections, impact policy and pedagogy. These intersections in turn influence the behaviours, interactions, and the engagement of young men and women inside and outside the school environment. Consequently, assumptions made during the creation and implementation of health and physical education policy about biological differences between young men and women create dispositions towards particular social behaviours pertaining to physical activity and eating practices. The reasons for the differences between the groups of young men and women were often internalized and considered “natural” by most participants. Consequently, young men and women who attempt to challenge the assumptions are met with resistance and withdraw when institutionally allowed. In this final chapter, I conclude this research study by providing answers to the major research questions and provide recommendations for Health and Physical Education policy, programs, and pedagogy to challenge the current practices and create an inviting and engaging environment for young men and women: an environment without restrictions based on biology or social expectations. Last, I summarize the major contributions, acknowledge the innate limitations of the study, and then suggest future research regarding the creation and implementation of Health and Physical Education policy.
Summary of Findings

At the inception of this research study, I sought to explore health and physical education policy and experiences thorough the voices of students, teachers, and key informants within the school board and to acknowledge my insider perspective. At the onset, I outlined six research objectives to guide and inform my data collection and analysis. The emerging data from exploring the objectives presented into three separate, yet associated findings: nutrition and eating behaviours; design and implementation of health and physical education classes; and expectations and evaluations of students inside the health and physical education classroom as well as in extracurricular activities, which I will discuss and summarize in the following section.

The first finding emerges about the different nutrition policies implemented in Ontario secondary schools. Nutrition policies have a long history within the educational environment due to the perceived urgency in shaping and regulating the eating behaviours of young people. The most recent concerns have been fuelled by outcries of “obesity epidemic” and concerns about the longevity of lifespan for current young people. Students receive biopedagogical messages (e.g., healthy vs. unhealthy foods) explicitly about the foods available within the school environment and implicitly through curriculum and class lessons. As elucidated in chapter four, there are significant and overt biological and sociocultural biopedagogical messages transmitted to students about their eating practices. The most recent School Food and Beverage Policy (2010) reduces food to its microscopic individual nutritional components, which conveys messages to students and constructs particular scientific “truths” (Ministry of Education 2010b). The policy also has underlying messages about the appropriateness of specific nutrients to benefit and maintain personal health. The creation of policies to force “good” food into the school environment and keep “bad” foods out of the school environment are mechanisms of regulation and surveillance. The policy serves as a disciplinary technology intent on protecting young people who are deemed to be at risk and unable or unwilling to establish beneficial eating choices and behaviours. The reduction of food to its components by nutrition science has created standardized recommendations about the nutrient requirements for an individual. Although these recommendations are often based on numerous factors such as age, physical size, and biological sex, it is evident from focus group discussions with participants that “biological sex” is often considered to be the leading determinant of nutrient requirements. An important implication of these findings is that students receive both formal instructions and lay messages that a strict
dichotomy exists between young men and women. Thus, students do not receive instruction about differences being due to numerous factors and not biological sex alone. This leads young men and women to establish eating behaviours based on these understandings.

For young men, the medicalization of food has focused their attention on their protein consumption, despite research suggesting little variation in protein requirements (Butte et al., 2000) and further research proposing that most individuals adequately meet their protein requirements without special eating behaviours (Phillips, 2004). Field et al. (2005) propose that dominant discourses circulate among young men and women that only young men are required to engage in eating behaviours that increase protein consumption. Ironically, this medicalization actually puts the young men at risk for poor health, with research supporting links between protein supplements and testicular cancer (Li et al., 2015) and links between obesity and overconsumption of protein (M. Campbell, 2015).

The medicalization of food has impacted young women by urging them to strictly classify food as “good” or “bad” and requiring them to eliminate certain nutrients and bad foods from their diet. These dominant narratives are partially the result of influence of media, advertising, and other cultural images.

These findings illustrate the need for schools to teach critical media and food literacy to assist in diminishing dominant discourses. Incorporating critical literacy would equip students with tools to critically appraise information combined with an increased awareness of barrier and sociocultural influences on health (Guttersrud, Dalane, & Pettersen, 2014; Velardo, 2015). Teaching food literacy would require schools to acknowledge the “collection of interrelated knowledge, skills and behaviours required to plan, manage, select, prepare and eat food to meet needs and determine food intake. Food literacy is the scaffolding that empowers individuals…to protect diet quality through change and support dietary resilience over time” (Vidgen & Gallegos, 2010, p. iiv). It could also empower students with “the ability to make decisions to support the achievement of personal health and a sustainable food system considering environmental, social, economic, cultural, and political components” (Cullen, Hatch, Martin, Wharf Higgins, & Sheppard, 2015, p. 143). This would contribute to the students’ ability to challenge deeply engrained biological or sociocultural norms about food or eating practices to achieve critical nutrition literacy.
The consequences of the financial considerations in the implementation of the nutrition policies within Ontario schools has been emphasized by the young men and women in this study and has also been corroborated by the staff. An implication of this finding is the urgent need to address social inequalities that exist affecting the affordability of food for some students and the need for the provincial government to create a strategy to make healthy food readily available for everyone. Strategies will need to acknowledge how social inequalities affect the varying gendered eating behaviours between young men and women constructed from biopedagogical messages they receive and interpret. Social inequalities privilege some individuals to consider health over financial cost when selecting food (Hupkens, Knibbe, & Drop, 2000). Creating a policy that counteracts the privilege by subsidizing healthy food within the school environment will not only foster access to all but also limit the influence of the external food establishments students currently seek in search of inexpensive food.

This study substantiates key findings from previous studies about the influence of peers on the food choices of young men and women (Bauer et al., 2009; D. Carter et al., 2003; Cooke & Wardle, 2005; Hill et al., 2008; Wouters et al., 2010). Young people in this study frequently consume fast food (Bauer et al., 2009), display gender differences in their food consumption (Cooke & Wardle, 2005; Hill et al., 2008), are influenced by their peers (Wouters et al., 2010), but do not acknowledge the effect of peers on their lifestyle choices (D. Carter et al., 2003).

This study contributes new knowledge in expounding how dominant biopedagogical messages about the differentiation of biological nutritional needs for young men and women contribute to social eating behaviours. The interconnected nature of these messages renders them hard to disentangle as behaviours that are biologically necessary from ones that are socially expected. For the young men, this translates into large consumption of protein to develop and maintain their muscles, while for young women, caloric restriction is necessary to achieve and maintain a smaller figure. The implication of these findings is that education about eating behaviours must acknowledge and manage the powerful nature of dominant social images of muscular men or slender women on students and how they affect the interpretation of educational and public health nutritional messages. Incorporating critical media literacy into the health curriculum will assist young men and women with questioning information instead of regurgitating it.
The second underlying theme emerging in my reading of the data concerns the design and the implementation of health and physical education classes (discussed in chapter five). The current structure of health and physical education classes creates environments of engagement for the young people who excel at traditional team sports and disengagement for those who do not. The types of activities also privilege certain masculinities and femininities while diminishing others. Teachers consider the differences between young men’s and women’s classes in choice of physical activities as well as modification of rules suitable to both biological needs and personal preferences of young people. However, narratives provided by some students offer a contrasting view to dominant pedagogy utilized by their teachers when constructing and executing health and physical education classes. Some young men and women seek to challenge the prevailing conditions but are met with resistance from their teachers and their peers. Consequently, this leads to the disengagement and demission of more than half of the young men and women from health and physical education.

The final underlying theme, discussed in chapter six, is about the expectations and evaluations of young men and women in health and physical education classes and the school’s athletic culture. When young men perform to their biological potential and meet athletic expectations, they are rewarded with praise from teachers and the respect of their peers. Young men who do not meet their assumed biological potential suffer social consequences of teasing or isolation. Conversely, peers praise young women when they comply with their expected performance in health and physical education and socialize with peers rather than challenging their bodies to be more physical than is culturally expected. By not challenging their bodies to be more physically literate, the physical skills of young women do not develop, thereby widening the gap between young men and women physically. For any of the young men and women to challenge current practices, they need to align with a performance that is contrary to what is presently established. This makes the nonconformist vulnerable to ridicule and academic consequence. The expectations within the classroom are consistent with the physical culture of the cocurriculars and a reflection of the sociological phenomena, which occur outside the walls of the school in media and professional sports.

A theoretical development illuminated by this research is the entanglement of sex and gender in biopedagogical messages young men and women receive inside and outside the school physical culture. Assumptions are reproduced about physical needs or ability of young men or
women, which in turn reproduce ideological expectations for their behaviours. Accordingly many young people withdraw from health and physical education when their bodies or physical capabilities do not correspond to the biological assumptions or they do not want to participate in the expected performances. Health and physical education is a conduit of the government’s attempt to instil healthy behaviours into youth and combat the “obesity epidemic” through the use of an established curriculum as a mode of disciplinary technology. However, with the use of traditional pedagogy and binary structures, health and physical education classes impose messages onto students that there are appropriate and different acceptable behaviours for young men and women rather than a continuum, which allows for individuality and for their various memberships in differing ethnocultural communities.

The second and third themes emerging from the data illustrate an urgent need to disrupt the current practice of competitive sports-based physical education and call on educators and policy creators to reconceptualize the current policies and structure of athletic physical cultures in schools. Reconceptualizing health and physical education into an alternative physical culture would require providing opportunities for young men and women to try alternative types of physical activities than the current dominant pedagogy and ideology focusing on team-based sports. The incorporation of physical activities such as yoga, taekwondo, cycling, et cetera, would afford all young people the opportunity of participating in activities regardless of sex, gender, ability, or body size. This change in pedagogical approach would diminish the privileging of certain young people while alienating others. In the current practices, young men and women who do not enjoy or excel at traditional sports become disengaged. Developing new policies for health and physical education classes as well as athletics, which do not create binary categorization for the participation in physical activity by young men and women is essential for increasing interest and enjoyment among young people. Transforming pedagogical approaches and restructuring health and physical education class is not without its inherent challenges, I argue these changes would create a physical culture of inclusivity and engagement, which has the potential to decrease the attrition of many students in health and physical education.

**Research Contributions**

There have been decades of research about gender equity in health and physical education (e.g., Azzarito & Solomon, 2005; Flintoff & Scraton, 2005; Garrett, 2004a; Vertinsky, 1992). However, these studies focus on gender and typically focus on young men or women in isolation.
A key contribution of this study is the analysis of the entanglement of sex and gender for young men and women. Specifically, this research has contributed to four different research contributions: theoretically, to the biopedagogical messages and implementation within schools; methodologically, by the comprehensive nature of the research study within the field of health and physical education research; empirically, through the exploration of the entanglement of sex and gender within health and physical education experiences and policies; substantively, through dissemination of the research in my work.

Theoretically, this research advances the notion of Wright’s (2009) concept of biopedagogy by examining the entanglement of sex and gender in health discourses and health and physical education studies. Biopedagogy has assisted in emphasizing the implicit and explicit messages young men and women receive about their bodies and behaviours. Although gender has been studied extensively in this field, to my knowledge, this is the first study to unpack the entangle of sex and gender. The ability of a young person to incorporate biopedagogical messages about their physical biology and perform femininity or masculinity within the confines of social expectations contributes to their acceptance into the health and physical education environment. The body pedagogies inside the school environment cannot be isolated from the broader physical culture wherein the young men and women’s bodies are symbols of distinction and intertwined with health and well-being (Shilling, 2010). The pedagogies within schools exude undertones of imperatives to take care of one’s body within the confines of gendered behaviours and strengthened by ideologies which assert personal agency (Giroux, 2004a; Nettleton, 1997). Young men who participate in eating large quantities of food (especially protein), engage in aggressive physical activity, and demonstrate hegemonic masculine characteristics reproduce biopedagogical messages about the expected social behaviours to meet assumptions about biological needs. Conversely, young women are required to restrict their eating behaviours, physical engagement, and have lowered expectations. The biopedagogical messages the young men and women receive about the nutrition and physical activity requirements and deployment of self-surveillance and processes of subjectification to fulfil their biological requirements as healthy, productive biocitizens are entangled with the messages about social and moral requirements not to become burdens on society. The young men and women acquire the tools necessary to monitor and discipline their bodies without hesitation.
Methodologically, the study is comprehensive in its approach by integrating policy analysis, key informant interviews, student focus groups, and ethnographic insights in the new political environment. This study contributes to the body of empirical knowledge (e.g., Atkinson & Kehler, 2012; Bramham, 2003; Hickey, 2008; Petherick, 2011; Rønholt, 2002; Wright & Burrows, 2006) in the field of health and physical education. This analysis derived from the presented data generates a dialogue apropos assumptions of sex, gender, and their intersections within biopedagogical messages and health and physical education policy. The comprehensive approach contributes new information to the experiences of young people in the implementation of the health and physical education policies in the school environment and changing political landscape.

Empirically, this research study illuminates the entanglement of biological assumptions and social behaviours with respect to the eating behaviours and participation in physical activity by young people. While using a biopedagogical lens to examine health and physical education is not novel, this study puts forward erudition that behaviours of adults and young people in this domain are inherently influenced by established Western “scientific truths” concerning distinct “natural” biological differences are circulated, and unpacks how the entanglement of sex/gender embodied in health and physical education experiences and policy. A finding that was not readily discussed, as it was not a specifically outlined purpose at the onset of this study, was the teachers’ education or past experiences. These past experiences contribute to the creation of biopedagogical messages that are passed on to the students and contribute to their experiences in classes. Teachers often teach the way they have been taught or experienced the world and negotiate within the school culture (Smyth, 1995). The teachers’ understandings and pedagogy mirror the curriculum and contexts of the eras in which they were students. This results in the reproduction of traditional approaches and binary representations of eating behaviours and physical activity. Teachers are the crucial conduits of health messages passed on to students from the government-created curriculum and broader society (Webb & Quennerstedt, 2010). Teachers are tasked with teaching the new health imperatives of monitoring and disciplining the body through “eating well” and regular exercise and monitoring (B. Evans, 2006). The pedagogies of schools cannot be separated from the broader physical culture in which the body is a representative form of distinction for health and masculinity or femininity (Shilling, 2010). Similar to the conclusions of Webb, Quennerstedt and Öhman (2008), teachers use their own
bodies as a tool of their work; teachers in this study also pass along their own personal anecdote to students as appropriate and expected behaviours. However, as Berg and Lahelma (2010) suggest, changing the current structure should not fall solely on the health and physical education teachers themselves; rather, the school culture and outside influences need to be understood and addressed in combination. This is vital for the effectiveness of any attempts to change any culture because the principles are reinforced and students are provided with different contexts for knowledge and skills. From my personal experiences within numerous secondary schools, it is common for any initiative to fall solely onto the subject teacher. For example, English teachers are often tasked with literacy, or mathematics teachers are responsible for numeracy. However, the most effective implementations occur when all teachers are involved, committed to the task, and understand their contributions while acknowledging personal limitations as demonstrated in active healthy schools research. This study has contributed to laying the groundwork for understanding of the influence of teachers’ preceding experiences and necessitates the need for future research.

This research illuminates the struggle of some young men and women who grapple with the assumptions made within the biopedagogical messages they receive and their frustrations in their attempts to challenge the current circumstances. Many young men and women within this study considered the assumptions made about their bodies and abilities to be “natural” and appropriate. It is clear the biopedagogical messages the students are receiving from implementation of health and physical education in schools is that there are “natural” biological differences between young men and women that justify differences in deployment of the curriculum between young men’s and women’s physical education classes to accommodate for the biological differences. These accommodations for biological differences also support the social and behaviour differences also assumed to be natural by many of the study’s participants.

We are at a critical point in North American culture because gender and sex are becoming recognizably more fluid; it is necessary, therefore, to critically examine and address the assumptions about what is considered “natural” or “normal.” Some critical questions still remain about how health and physical education policy can be created and implemented as to be more inclusive towards individuals regardless of sex and gender assumptions, and about how educators support students in deciphering biopedagogical messages about their eating behaviours and physical activity.
Substantively, the findings from this research study have been used in transforming professional development opportunities I deliver across the province of Ontario. The findings are also being used in conversations within school board policy committees I am involved with. Changes can only occur when past ideas are challenged. It is important to share research findings such as these as a way to contribute to the evidence base decision making model currently employed in school boards within Ontario.

Policy Recommendations and Considerations

A number of recommendations can be offered to increase the engagement of young men and women in health and physical education. These policy and pedagogical recommendations are further to the ones made in each chapter summary and the summary of the research findings in this chapter. Although the results from this study may not be transferrable in its extremes to all secondary schools in the province of Ontario, there are some aspects in each school that fall within the spectrum. Consequently, the recommendations provided throughout this document are a result of specific experiences of the participants in this study; the recommendations are still transferrable and can be implemented outside the perspective of this school’s environment.

The current nutrition policies in Ontario need to be reevaluated to address the issues raised within this study. The medicalization of food by the current nutrition policy creates distinctions of “good” versus “bad” food, which contributes to a larger problem in neoliberal practices. It creates an environment which bans certain food from within the confines of the school. This approach does not teach the students about healthy nutrition choices or create healthy life skills. As evident in this study, secondary school students will leave the school to seek out options not offered at school. Nutrition education should be incorporated into the mandatory Grade 9 health and physical education course where students can learn about making healthy food choices. Classroom lessons need to be practical and interactive to assist young people in its application (Gray, 2015). Schools can assist students in planting a garden to produce fruits and vegetables to be used in the school cafeteria. In addition to the production of food, the school cafeterias could be operated at the school level and would involve students in the purchasing, preparation of food, and overall operations. Students would gain employable skills to use in the future and develop knowledge about the creation and production of food as well as the food industry. These students would have input on the types of products offered, and can educate other students about making healthy food choices. This approach also addresses the financial issues of healthy food because
the cafeteria would run as a non-profit enterprise. This would allow students to be engaged in the process instead of the current neoliberal state. In the event that current cafeteria contracts or physical spaces limit schools from involving students in the food production or preparation, financial subsidies must be provided to schools or students with financial need so they are provided with affordable food.

Although some scholars (McDonagh & Pappano, 2008; Travers, 2008) have called for the elimination of sex segregation in sports, there are a range of institutional and social constraints to adopting a mixed-sex health and physical education system (McCaughtry, 2006). In Ontario schools, this proves to be problematic within the school system until more progress is made in promoting women’s sports. As evidenced by the data presented in this study, extracurricular sports involving young women are considered by many to be secondary to those of young men. Participants spoke about inconsistencies in the celebration of athletes, problematic language, and distribution of resources. Participants stated that young men’s athletic accomplishments are acknowledged and celebrated more often and in more elaborate ways. Promotion of young women as athletes needs to occur within the school environment so as to celebrate all students and their athletic ability. Additionally, role modelling by teachers and school staff in their choice and use of language (i.e., infantilization) and phrases (i.e., throwing like a girl) needs to change to be inclusive. Words associated with young men or women athletes should not connote lesser quality. Furthermore, efforts should be made by schools to ensure equitable sharing of resources (i.e., equipment, gym time, et cetera). Unlike the Title IX of the Education Amendments of 1972 in United States of America, Canada does not have equivalent legislation to require educational institutions to spend equal resources on young men’s and women’s athletics. Although the American legislation is not without its problems, it establishes an understanding for equitable spending and allows for athletes to challenge any discrepancies. Local and provincial sports organizations along with the Ministry of Education must work together collaborate on a policy that addresses the distribution of resources.

For some sports governed by OFFSA, players who play on “rep” teams are not allowed to play on school teams. This varies between sports and even between young men’s and women’s sports. For example, rep players are not banned from playing on a secondary school’s young women’s hockey team, but they are for the young men. School teams provide an opportunity for young people to participate in physical activity, whereas they may not have opportunities
elsewhere. Precluding rep players from participating on school teams would open opportunities to young men and would also address concerns about opening up young men’s teams to young women and limiting the opportunities for young men.

The findings of this research suggest there are different opportunities for young men and women to participate in physical activity within the province of Ontario. Within health and physical education classes, traditional team sports should be integrated with other types of teams and individual physical activity such as ultimate Frisbee, yoga, karate, et cetera. This approach would limit the privileging of certain abilities and bodies. It would increase engagement because of the different choices as well as provide an opportunity for young people to sample different types of physical activities, and it might pique their interest for future pursuit (How, Whipp, Dimmock, & Jackson, 2013; Robinson & Berezowski, 2016). For extracurriculars, the Ministry of Education and OFFSA need to work together to create teams for all young people, although issues with this approach can arise about resources, qualified coaches, and sustainable student populations to support all school teams. However, local solutions such as sharing resources between schools, seeking help from community coaches, and merging schools to create a bigger population for extracurricular athletics would help to address these issues. Furthermore, students could contribute by being junior or assistant coaches to younger teams. This would foster student leadership and decrease the demands on school staff.

Participants in this study expressed frustration about the lack of transparency surrounding evaluations in health and physical education class. With increasing pressure for students to achieve high academic success for post secondary opportunities, uncertainty about the evaluation of health and physical education not only removes the fun from physical activity but also causes some participants to demit from health and physical education courses. The use of evaluations, numerical grades and comparing students to an established standard may be an effort by health and physical education teachers to ensure academic integrity within their subject area. However, changing the overall structure and course evaluation from a numerical grade to a pass/fail school credit will eliminate the pressure teachers’ feel to ensure academic integrity and the stress some students experience for being evaluated about their physical abilities and comparison to their peers. This has the potential to increase the enjoyment and pleasure within health and physical education while eliminating the negative associations students have with the class. Furthermore,
this change has the potential to decrease the number of students who demit from the subject because it would be a break from other evaluative courses and allow all students to succeed.

Intramural sports during lunch or after school hours are common in elementary and secondary schools. In this particular school, intramurals offered were the traditional team sports played in health and physical education class. As a result, this attracted the same students who excelled at traditional team sports. Although these types of activities should not be completely eliminated, rather they should be integrated with “nontraditional” activities. Similar to what is done in elementary schools at recess, secondary schools could offer open spaces for students to “play” and move their bodies in any manner they choose. This will also provide an outlet for students to relieve some stress and decompress from sitting at desks in their other classes.

Health and physical education courses are considered to be spaces that positively impact young people’s physical activity and health (Cairney et al., 2012). However its current form and practice of classes that segregate males and females is troubling because it encourages young men or women to engage in behaviours that represent narrow definitions of masculinity or femininity. For students who do not identify as a young man or young woman, the current structure does not allow for the student to enrol in the class in which he or she identifies. An alternative system that allows students to choose a course by interest or ability would help to create an inclusive system. Currently schools across the province have specific sport- or activity-focused courses. This allows for young people to register in a course that is of interest and would increase their engagement with the course. Although ability can be considered socially constructed (Hay & Macdonald, 2010; Wright & Burrows, 2006), students could self-select their course level (i.e., beginner, intermediate, advanced) or consider recommendations from health and physical education teachers. This process is similar to the registration structure in other courses in secondary schools.

The use and design of the physical spaces within schools may have limitations on the comfort of the young people within them. As was the circumstances in this study’s school, young men and women may be required to share physical spaces for health and physical education classes because schools may only have one gymnasium or weight room. To be inclusive of all cultures, young women need a space where they can be physically active without the gaze of young men. Although schools may have limitations in their physical structures within their buildings, schools can be creative with existing spaces or create timetables to ensure there is an
option for young women to enrol in a health and physical education course when there are no young men using the facilities during that period.

Finally, the findings of this study indicate the importance of teachers in both their choice of pedagogy and their mode of interactions with students. A disconnect between perceptions of teachers about the interests or desire of all students and the reality for some of the students in their classes is evident. Teachers reinforce biological assumptions and expected social behaviours through their words or pedagogy. This perpetuates stereotypes, and young people are reluctant to challenge the assumptions because of the fear of resistance from their teachers. I recommend teachers work towards meeting the needs and interests of all students by offering different types of activities and controlling for varying ability within and between young men and women. Teachers can introspectively examine their pedagogy to ensure they are not limiting students’ expressions of the range of femininity, masculinity, or ambiguity to dominant expectations. Relevant curriculum and pedagogy should provide opportunities to emphasize inclusive practices while confronting exclusionary practices (S. Clark & Paechter, 2007). Using a critical pedagogical approach and shifting the power relations towards the students by incorporating student voice into the organization of the course will allow all students to feel valued and find their place within the physical culture of that school. Overhauling the current system should involve students with the design and execution of all health and physical education courses alongside their teachers from the very beginning. Schools might consider having all the physical education classes blend together in a class period so multiple activities at different abilities levels and interests could occur for students to choose from. By providing the students choice in activities and opportunities to co-teach with their teachers, students’ voices are valued and students are provided with leadership opportunities. Students with expertise leading physical activities could expose their peers and teachers to new activities that may peak their interest and would not otherwise have exposure to. Starting from scratch with students at the table will contribute to a much-needed change in the approach of health and physical education, an approach that would be inclusive of all bodies, interests, abilities and gender expression.

Limitations

Although there are meaningful contributions imparted from this research study, as it is one of the only studies to examine the entanglement of sex and gender within health and physical education policy in Ontario secondary schools, there are some inherent limitations to this study.
One of the most obvious limitations of this study is the location of data collection. Socioeconomic status is known to impact participation in sport at different stages in life (White & McTeer, 2012). With most participants self-identifying as middle or upper middle class, their higher socioeconomic status provides them with more opportunities in sport and physical cultures outside of the school environment than if the participants were of lower socioeconomic status. Additionally, the majority of the participants self-identified as Caucasian, which possibly influences the types of physical cultures they have been involved in (Goldsmith, 2003) as well as the biopedagogical messages the students have received.

The location of the study also contributes to the next limitation, which is the generalizability of the results. Although the implementation of policies should be similar in all schools to ensure its intended purpose is achieved and the experiences of young men and women during implementation differences may arise because of variations across schools in staff, student population demographics, funding, et cetera. Therefore the generalization of the data to the implementation of health and physical education policies to all secondary schools in Ontario is limited. However, the current study provides insight into future research to examine the entanglement of sex and gender with other intersections of race, ability, and sexuality. This holds the possibility of increasing the engagement of young men and women in health and physical education and the creation a supportive sport and physical culture. This limitation provides a starting point for future opportunities to expand on the presented data at other secondary schools for reflection of current practices or further research.

A number of barriers existed in accessing or recruiting participants which contributed to limitations in this study. Some students may have been willing to participate in this research study but were blocked by their teachers. Although all students within the secondary school were eligible to participate in this study, teachers within the school acted as institutional gatekeepers by allowing or blocking me from access to their classroom to invite students to participate in the study. In addition, the requirement that students obtain written parental consent created another barrier. This requirement to follow up and submit forms may have resulted in a pool of participants who may be more of an academic nature because they tend to be more organized. The requirement for active consent may have contributed to lower numbers of young men participating in the focus group. Using a implied or passive consent process has been shown to have more success with gaining young men’s participation in research (Unger et al., 2004).
research ethics board of both the University of Toronto and the school board required the use of active consent in this research study. Although the voices of the other students are also valued, they have not been collected due to these challenges. However, the sufficient sample size and use of multiple sources to collect data (policy analysis, interviews with key informants, and focus groups with students) created sufficient empirical points of analysis for the research findings.

The final limitation for this study was the exclusion of questions about external influences on the biological assumptions and gender embodiment. It was determined that asking specific questions pertaining to the influence of parents would have been created a scope and source of data that would have been unmanageable. When participants spoke about the influence of the parents, follow up questions were explored but only a limited number of students mentioned their parents when answering the outlined focus group questions. Although policy and teachers may try to mitigate the negative influences or circumstances, students are not immune to the external influences outside the school walls. It is without doubt the parents would have influence on the entanglement of sex and gender. However, without specific questions being asked to all participants about the influence, it would be perilous to make inferences on such influences. Nonetheless, this limitation provides an opportunity for future exploration into the influence of this topic.

**Future Directions**

This study examined the biopedagogical messages and discourses the students receive about nutrition inside the school environment. These messages varied in biological needs or expected and acceptable social behaviours. The young men and women in the focus groups spoke about the distinctions surrounding nutritional needs based on biological sex but also the social behaviours established by cultural images or expectations. The intersectionality and entanglement of sex and gender are evident throughout this research study. Future research could examine the role of food companies’ and nutritional supplement companies’ marketing strategy in shaping the reproduction of these biopedagogical messages and their incorporation into the classroom pedagogy. This would contribute to a further understanding of complimentary or competing biopedagogies that are present outside the school environment.

Observing additional health and physical education classrooms in different school boards across Ontario could contribute to further understanding of the interpretation and implementation of health and physical education policies. The open language used in the range of health and
physical education policies’ text contributes to variation within and between schools. Private, public, and Catholic schools within Ontario are governed by the same Ministry of Education policies but may have different pedagogical and philosophical methods and traditions. The biopedagogical messages received about sex and gender could be influenced by sociocultural dimensions such as race, religion, disability, geography, economy, et cetera that intersect. Exploring other schools’ environments would also afford more data in different academic environments and influence of sociocultural qualities.

As a continuation of this research, case studies of secondary schools that implement health and physical education policies which integrate young men and women in classes based on ability or interest rather than sex could be pursued. These case studies could be used as a model for other schools looking to transition to a more inclusive health and physical education environment.

Research about young men and women who resist or challenge the present assumptions is also needed. Research would provide an opportunity for students to have a voice without the distraction or intimidation of dominant young people. In turn, exploring the students’ data with health and physical education teachers would provide opportunities for rumination about their personal understandings, pedagogical approaches, and biopedagogical messages. Furthermore, teachers are agents of change in the planning and delivery of policy and instrumental role models in the physical culture. Providing teachers with this study’s data and other information challenging traditions or assumptions would provide teachers with an appreciation of the power their assumptions have on the implementation of policy along with the experiences and engagement of their students in health and physical education classes.

**Final Thoughts**

This study has foregrounded assumptions about the dichotomy constructed between and within sex and gender in health and physical education policy, yet how they intersect in school experiences expressed by students, teachers, and other key informants. These insights contribute to a body of knowledge examining the engagement of young men and women in health and physical education classes. The voices of all student participants indicate the need to change current policy to a more inclusive one and to translate these ideas into practice. The focus by government, public health, and education officials about health and physical education curriculum as a vehicle to create healthy, productive citizens is limited and does not meet the
needs of every student. Instead, health and physical education should be an inviting and inclusive environment that allows young men and women to experiment with a cornucopia of activities. Their opportunities and choices should not be limited by biological sex. While biology determines many phenotype characteristics such as height or eye colour, however, biology does not determine a student’s interest in a particular type of physical activity. In the creation of policies and programs, language and interpretation should be considered.

Educators need to take pause, reflect, and question personal and professional assumptions in order to adapt pedagogy. Pedagogy is influenced by the past but needs to be innovative and evolving. As an educator, it is my hope that one day that assumptions about ability and preference in activity are not created based on an individual’s biological sex, race, class, ability, et cetera. This will prevent the creation of specific expectations about social behaviours based on biological sex. Instead of binary classifications, a spectrum is created for all individuals. It is difficult to break the mould and challenge your assumptions and do something different from how one was taught, but it is essential to move forward and improve the experience of all students in health and physical education. As Ann, a Grade 12 student, suggests:

We need to turn phys ed into actual physical education because for a person’s health like you need to be active every day for whatever, like 60 minutes a day, and if you do pick a sport like dodgeball where the people who just don’t enjoy it are like sitting at the back, it’s taking away the point of physical education and just turning it into a dodgeball class. Just because that’s how phys ed always been done, doesn’t mean it can’t change to be something better.
References


*Thymos: Journal of Boyhood Studies, 6*(2), 166–185. doi:10.3149/thy.0602.166


Bauer, K., Yang, Y., & Austin, S. (2004). "How can we stay healthy when you're throwing all of this in front of us?" Findings from focus groups and interviews in middle schools on environmental influences on nutrition and physical activity. *Health Education & Behavior, 31*(1), 34–46. doi:10.1177/1090198103255372


Fink, J. (2012). Homophobia and the marketing of female athletes and women's sport. In G. Cunningham (Ed.), *Sexual orientation and gender identity in sport: Essays from activists, coaches, and scholars* (pp. 49–60). College Station, TX: Center for Sport Management Research and Education.


http://foodsecurecanada.org/sites/default/files/coalition_for_healthy_school_food.pdf

http://www.parl.gc.ca/About/Parliament/SenatorEugeneForsey/book/chapter_3-e.html


Fusco, C. (2003). *There are a lot of eyes on this space! The (re)production of subjectivities in cultures of work and working out: A postmodern, intertextual, and spatial ethnography*. (PhD), University of Toronto, Toronto, Ontario.


Hutson, D. (2013). ‘Your body is your business card’: Bodily capital and health authority in the fitness industry. Social Science & Medicine, 90, 63–71. doi:10.1016/j.socscimed.2013.05.003


Kitzinger, J. (1994). The methodology of focus groups: The importance of interaction between research participants. *Sociology of Health and Illness, 16*(1), 103–121. doi:10.1111/1467-9566.ep11347023


Krane, V. (2001). We can be athletic and feminine, but do we want to? Challenging hegemonic femininity in women’s sport. *Quest, 53*(1), 115–133. doi:10.1080/00336297.2001.10491733


Ministry of Education. (2004). *Policy 135, "Healthy foods and beverages in elementary school vending machines"*. Retrieved from Toronto, ON:


OFSAA. (2016a). OFSAA boys' hockey championship. Retrieved from https://docs.google.com/document/d/1cQra-wtk1cuHu6ltj2BkNGIzH6MeiHnjInfWFGSIu64/edit

OFSAA. (2016b). OFSAA girls' hockey championship. Retrieved from https://docs.google.com/document/d/1DntozfRyRN8chpHQq0Z125o8Jr3OcDF2-9t3DAMQQsE/edit


doi:10.1080/13573322.2011.605116


doi:10.1080/026404198366326


doi:10.1215/03616878-30-5-869


Swain, J. (2000). 'The money’s good, the fame’s good, the girls are good”: The role of playground football in the construction of young boys’ masculinity in junior school. British Journal of Sociology of Education, 21(1), 95–109. doi:10.1080/01425690095180


Tinning, R., & Glasby, T. (2002). Pedagogical work and the 'cult of the body': Considering the role of HPE in the context of the 'new public health'. *Sport, Education and Society, 7*(2), 109–119. doi:10.1080/1357332022000018814


Appendix A

Parents/Guardians Information and Consent Letter

UNIVERSITY OF TORONTO
FACULTY OF KINESIOLOGY & PHYSICAL EDUCATION

Staff and Students’ Understanding of Gender in Health and Physical Education

April 1, 2013

Dear Parents/Guardians,

My name is Sarah Gray and I am a Ph.D. student in the Faculty of Kinesiology and Physical Education, at the University of Toronto. Working under the supervision of Dr. Margaret MacNeill, I am conducting a research study to explore the opinions of both staff and students regarding physical education and nutrition policies within the school environment.

The University of Toronto Ethics Board and the Research Advisory Committee of the _____ District School Board have granted approval of this study. The High School principal has also given permission for this study to be carried out at ________. The study involves focus groups with Grade 9-12 students.

Your son or daughter is invited to participate in this study called “Staff and Students’ Understanding of Gender in Health and Physical Education.” I am writing this letter to obtain your consent to allow your son or daughter to participate in a focus group with myself and six to eight other interested students of the same sex. The focus group will be conducted at ________ High School, during the lunch period and will take approximately 45 minutes. Students will be provided with lunch during their group discussion.

Students will be asked to express their opinions about physical education policies, physical activity and nutrition. Students’ opinions are often not included in education research and I believe your son or daughter has valuable information to contribute to our understanding of physical education policies.

Participation in this study is completely voluntary and will not impact your son or daughter’s academic standing in physical education or any other subject. Your son or daughter’s participation in this study is voluntary and he/she may withdraw from participation at any time without academic penalty or any other negative consequences.

For confidentiality reasons, participating students can choose a pseudo name, so they will neither be referred to by their legal names during focus group, nor will their real names be used in any report or presentation of my Ph.D. study.

All interviews will be audio-recorded and transcribed. All data generated from the interview including audiotapes, hand-written interview notes and transcripts will be kept in a locked file drawer, an encrypted USB memory stick, or a password protected computer for the duration of the study. Recorded information shared within the focus group will only be accessible to the primary researcher, Sarah Gray and her supervisor, Dr. Margaret MacNeill. Research data including audiotapes and transcripts will be destroyed five years after the completion of the research project. The findings from this research will be published; however, any quoted material from the focus group will remain anonymous; the school will not be identified and will be disguised when necessary.

Should your son or daughter disclose any information that may indicate they are harming themselves or have been harmed, you and the appropriate authorities will be immediately notified. There is a legal obligation for the researcher to report any suspicion of child abuse or neglect.
You may ask questions at any time during this research study, however general information shared during the focus group will be kept in confidence unless deemed to be damaging to your son or daughter’s well-being.

Although strategies will be used to minimize psychological and social risk, there are always some risks with revealing personal experiences in a group setting. Although participants will be asked to keep the focus group discussion confidential, there is a risk that participants may choose to repeat information shared within the group. The discussion during the focus group is completely voluntary and at any point during the focus group, students may choose to not answer a question or may leave the room without any penalty.

Although there is no direct benefit from participating in this study, it will provide an opportunity for your son or daughter to discuss their school experience and express their ideas about the physical education policies and programs. Your son or daughter’s participation in the study will provide important information that may be used to help in future policy development. Future teaching practices may also benefit from the student input received from this research. Upon completion of this research study, you and your son or daughter can request a copy of the research report.

The ___________ District School Board Research Advisory Committee and the University of Toronto Ethics Board (approval #28666) have approved this research project. If you have any questions about the University of Toronto approval, you can contact the Office of Research Ethics at ethics.review@utoronto.ca or 416-946-3273.

If you have any questions about this study, or your child’s participation in it, please feel free to contact me by phone 905-691-1603 or email at sarahk.gray@utoronto.ca. You may also contact my supervisor, Margaret MacNeil (Associate Professor, Faculty of Kinesiology and Physical Education) at margaret.macneill@utoronto.ca or 416-978-0598.

In order to grant permission for your son or daughter to participate in this study, please sign and return the attached consent form. Your son or daughter can return the signed consent form, along with the assent form, to his or her teacher or to the box in the Main Office. Please keep the duplicate copy for your files.

Thank you for considering your son or daughter’s participation in this research study.

Sincerely,

[Signature]

Sarah Gray
Ph.D. Candidate
University of Toronto, Department of Exercise Science
Faculty of Kinesiology and Physical Education
sarahk.gray@utoronto.ca
Please read the following and if you agree to your son or daughter participating in this research project please sign below. I understand that:

- this study is designed to investigate students' interpretation and actualization of physical education policies;
- my child's participation in a tape-recorded group interview with six to eight of his/her peers.
- the interview will be conducted at the school during my child's lunch period;
- the interview will take approximately 45 minutes;
- my child's participation in this research study will be strictly voluntary and he/she may leave the focus group interview at any time without any negative repercussions. My child may decline to answer any questions in the group interview;
- my child's participation is completely voluntary and will not impact his/her academic standing in any of his/her classes;
- my child will not be identified, in written reports, publications or during verbal communications derived from this research;
- the information gathered in the focus group will be kept in strict confidence by the researcher;
- my child and I will have the opportunity to ask questions at any time during the research study;
- general information shared in the focus group will remain in confidence unless deemed to be damaging to my son or daughter's well-being;
- should my son or daughter disclose any information that may indicate they are harming themselves or have been harmed by someone else, I will be immediately notified along with the appropriate authorities;
- the researcher has a legal obligation to report any suspicious behaviour that may suggest acts of child abuse or neglect; and
- only the researcher, Sarah Gray and her Supervisor, Dr. Margaret MacNeill will have direct access to the information shared within the focus group.

I, __________________________, have read the above information and consent for my child, __________________________ to participate in the research study called ‘Staff and Students’ Understanding of Gender in Health and Physical Education’.

______________________________
Parents'/ Guardian's Signature

______________________________
Date

For the purpose of providing an appropriate lunch, please indicate if your child has any food allergies or restrictions:

______________________________
Appendix B

Student Information and Assent Letter

UNIVERSITY OF TORONTO
FACULTY OF KINESIOLOGY & PHYSICAL EDUCATION

Staff and Students’ Understanding of Gender in Health and Physical Education

April 1, 2017

Dear Student,

I am a Ph.D. student with the University of Toronto. I am conducting a research study to examine the opinions of both staff and students regarding physical education and nutrition policies within the school environment. You are invited to participate in the research study by giving your opinions and experience with current physical education policies and programs.

You will have the opportunity to talk about things you like and dislike about the current physical education policies and physical education experiences during a focus group to be held at your school. You can share your ideas and opinions about physical activity and nutrition within the school as well as hear other students’ ideas and opinions about the current policies and physical education classes.

The focus group will be conducted at your school during the lunch hour. You will not receive any financial compensation from participating in my study. However, lunch will be provided for you during the focus group. Please notify me in advance if you have any allergies.

Your participation in this research study is strictly voluntary and you may leave the focus group at any time without any negative consequences. You may also refuse to answer any questions and you can ask questions at any time. The focus groups will be tape-recorded but the tape can be stopped at any time. Your identity and personal information will be concealed through a pseudonym (a fake name you choose) and will not be written down throughout the study. However, during the group discussion, if you discuss information that may lead the researcher to suspect child abuse or neglect, the researcher has a legal responsibility to report this information. Copies of the transcripts will be stored on a password-protected computer and any paper materials will be kept in a locked cabinet.

Participation in this study will not impact your academic standing in any course in which you are currently enrolled or may be enrolled in the future. Only the researcher, Sarah Gray, will have access to the information shared in the focus group, which ensures your confidentiality in participating in this study. Furthermore, the findings from this research will be published. However, any quoted material from the focus group will remain anonymous; the school will be identified and will be disguised when necessary.

Although strategies will be used to minimize psychological and social risk, there are always some risks with revealing personal experiences in a group setting. All participants will be asked to keep the focus group discussion confidential. There is a risk that other people in the focus group may choose to repeat information shared within the focus groups. The discussion during the focus group is completely voluntary and you may choose to not answer a question or may leave the room at any time without any penalty.

There are no specific benefits to participating in this study. However, you will have the opportunity to share your experiences in physical education, which may be used to form future policy and teaching practices. Additionally, at the conclusion of the study, you can contact me for a copy of the report or ask further questions.
The ______ District School Board Research Advisory Committee and the University of Toronto Ethics Board (approval #28666) have approved this research project. If you have any questions about the University of Toronto approval, you can contact the Office of Research Ethics at ethics.review@utoronto.ca or 416-946-3273.

If you are interested in participating in this study, you will have to complete and return the attached parental consent form and the student assent form to your teacher or to the box in the main office. The Student Assent form further outlines the details of your participation. The possible focus group dates are listed below. Please indicate your preferences in dates on your student assent form.

Focus Group Date Possibilities
Dates: April 8, 9, 10, 15, 16, 18, 19
Location: Library Seminar Room #1

Thank you for taking the time to consider participating in this research project. If you have any questions please contact me by phone at 905-691-1603 or by email at sarah.gray@utoronto.ca, or my supervisor, Margaret MacNeill by phone at 416-978-0598 or email at margaret_macneill@utoronto.ca.

Sincerely,

Sarah Gray
Ph.D. Candidate, Department of Exercise Sciences, University of Toronto
I understand that:

• this study is designed to find out about my opinions of physical education policies and how they might affect me and my experiences in physical and health education;
• I will be participating in a focus group with 6–8 students;
• I will respect and value the opinions of others within the group and I will treat what others say with respect;
• I will not talk about what others have said during the focus group after it is over to protect the privacy of my classmates;
• the focus group session will take approximately 45 minutes and will be conducted at school during lunch periods;
• the focus group session will be tape-recorded;
• my participation in this study is voluntary, and I may withdraw at any time without any penalty;
• I may ask questions at any time and I may refuse to answer any question or not participate in any part of the discussion;
• participation in this study will not affect my academic standing in any of my classes;
• Only the researcher Sarah Gray and her supervisor Dr. Margaret MacNeill will have direct access to the information shared within the focus group;
• if I reveal any information that is deemed to be damaging to my physical or emotional wellbeing, I understand that the researcher will offer me support by directing me to the appropriate counselling resources;
• if I make a direct comment about acts of self-harm, or harm done to me by someone else, I understand that my parents/guardians will be notified along with the appropriate authorities;
• the researcher has a legal obligation to report any suspicious behaviour that may suggest acts of child abuse or neglect;
• the information I share will be kept on a password-protected computer or in a locked cabinet by the researcher and will be destroyed after five years;
• to maintain confidentiality, I will choose a pseudo name. My real name will never be included in any written documents or presentations of the study findings.

I, ___________________________ (please print your name) consent to participating in this focus group for the study “Staff and Students’ Understanding of Gender in Health and Physical Education”.

_________________________________  ________________
Signature Date
Appendix C

Focus Group Discussion Guide

Introduction Script:
Thank you for taking the time to participate in this research study. I want to remind you that you may drop out of this study at any time without consequence. If you choose to withdraw, no information shared during the interview will be used in the study’s final analysis. You do not need to answer every question and may ask clarification if you do not understand. Your real name will not appear on any research report or audio tape so you can’t be identified. I ask that you do not discuss any information discussed within this focus group, what other participants say outside the confines of this room so that everyone’s privacy is protected.

Introductory Questions:
Are you currently enrolled in physical education in school?
Are there physical activities you participate in outside of school?
  Prodding:
      • Do you go to the gym? Do you play in a sports league? Dance?

Nutrition Policies Questions:
In September 2011, the school cafeterias had to change the types of foods they sell to items that are considered healthier. Has this impacted your use of the school cafeteria?
  Prodding:
      • Do you eat there more or less?
      • Do you go to food places outside the school more often?

Where do you eat your lunch?
  Prodding:
      • Do you eat in the hall? School cafeteria? Go home?

Does where you eat your lunch influence what and how you eat?
  Prodding:
      • If you buy your lunch at school is it healthier than what you would pack from home? If you go to a restaurant do you eat certain foods?

Does where you eat your lunch influence what and how you eat?
  Prodding:
      • If you eat with friends does that change what you would normally eat?

Are there differences in concerns about nutrition between young women or young men?
  Prodding:
      • Do young women and young men eat different things?
      • Do young women and young men talk about nutrition more?

Do you have any complaints about the current school nutrition policies?

Are there any changes you would make about the nutrition policies in schools?
Physical Education and Sport Questions:
What assumptions about sex (biological differences between young women and young men) are made about the physical abilities within physical education and sport?

   Prodding questions:
   • Do you feel that teachers think there are differences in physical abilities between young women and young men?
   • Do you think/feel these differences exist?

What assumptions about gender (social/cultural differences between young women and young men) are made about behaviour differences within physical education and sport?

   Prodding questions:
   • Are there differences between how young women and young men are treated by teachers in physical education class?
   • Are there differences between how young women and young men are treated by each other in physical education class?
   • Are there differences between how young women and young men athletes are recognized or rewarded?
   • Are courses or activities designed to specifically appeal to young women or young men?

Are there different standards for young women or young men in competition?

Does the fact that your physical education teacher is a man or a woman impact your thoughts about the course or ability to learn?

Do you think the current physical education courses suit the needs of all students?

   Prodding questions:
   • Why?
   • Why not?
   • What needs do students have?
   • What could be changed to make physical education more appealing to you?
   • What do you think are the differences between young men’s and young women’s physical education classes?

Future:
Are there any changes you would make to current physical education policies, or physical education classes?

Are there any changes you would like to make about sports within the school?

Are there any new policies you would like to introduce?
Appendix D

Letter of Information for Key Participants

UNIVERSITY OF TORONTO
FACULTY OF KINESIOLOGY & PHYSICAL EDUCATION

Staff and Students’ Understanding of Gender in Health and Physical Education

April 1, 2013

Dear Participant,

I am a doctoral student in the Faculty of Kinesiology & Physical Education at the University of Toronto examining physical education policies. I am also an Instructional Program Leader with the _____ District School Board. I am conducting a study to examine gender differences which may exist within the creation, interpretation, delivery and actualization of these policies by school board personnel, secondary school staff, and secondary school students.

The Research Project: The purpose of this research study is to investigate and determine if sex, gender and their intersections mediate Health and Physical Education policies, curriculum, pedagogical practices, as well as studying the impact these have on students in Grade Nine. Sex is defined as an individual's biological construct and encompasses anatomy, physiology, genes, and hormones. Gender on the other hand is a social construct that is culturally based and historically specific. This research study will examine sex and gender individually but also how one may influence the other. In order to deepen our understanding of the reasons physical activity levels have decreased among youth, particularly in young women, it is necessary to obtain the opinions and experiences of students in the physical education programs.

Details of Your Participation: If you agree to be a key informant in this study, you will be asked to discuss physical education policies, how they influence school programs, teaching practices, student engagement, and any impacts on gender relations between young men and young women. Your knowledge and experience from within the school setting will be invaluable in the examination of policy and curriculum. This study will involve a 45–60 minute interview.

Your personal information will be kept strictly confidential and you will remain anonymous in reports and research presentations. Your interview will be recorded on audio-tape with your permission. You may choose to not have the interview audio-taped, but still continue to participate in the research (written records will be secured - see below). You can request that the recorder be turned off at any point in the interview and can request that any recorded information be retracted and erased from the tapes. You may decline to answer any question at any time.

It is important to note that your participation is completely voluntary. Your choice to agree or decline to participate in this study will be respected and kept confidential. You may withdraw from the study at any time, all data pertaining to you will be destroyed without penalty.

Please note that you will not receive any financial compensation for participating in this study. There are no specific benefits to you for your participation in this study. However, the information gained from this study could be used to form future policy and pedagogy. The interview will take place between April 2013 and June 2013. The date and location of the interview will be structured and co-ordinated to meet your schedule and at a mutually agreed upon location.

Upon completion of the interview, the data will be transcribed and coded for themes related to the central research questions. If you have chosen for the interview not to be audio-taped, you will receive a copy of my notes so that you may clarify or elaborate on any points of discussion you feel necessary.
Privacy & Confidentiality: Unless otherwise indicated by you, all information obtained in this study will be kept strictly confidential and you will remain anonymous in all reports and presentations. Raw data from interview transcriptions will be saved on a password-protected computer and encrypted USB stick. Each participant will choose their own pseudonym that will be used to identify interview notes and/or audio-tapes of the interviews. One list that matches the pseudonyms with the names of the participants will be kept in a locked file cabinet drawer. I, Sarah Gray, will remain the sole key-holder to this drawer and will be the only person with access to the raw data and numerical participant codes. Data will be stored in a locked file cabinet or on a password-protected computer for five years after the completion of this study, at which point all information will be destroyed.

I will be the only person who has access to your information (name, position, affiliation, etc.), which ensures your confidentiality in participating in this study. The findings from this research will be published; however, any quoted material from the interview will remain anonymous; the school board will not be identified and will be disguised when necessary.

Research Translation: Your participation in this study will help to further education policy research and advance knowledge in the area of physical activity. Potential benefits to you include the opportunity to discuss and reflect on your understanding of physical education policies and their implementation, and potentially being offered participation in a professional development workshop based on the results of the research at a future date. Upon completion of my dissertation, you may request a research report. Other possible research products might include academic conference presentations and scholarly articles.

There is low risk with participation in this study. The District School Board Research Advisory Committee and the University of Toronto Ethics Board (approval #28666) have approved this research project; copies of both approvals are included. If you have any questions about the University of Toronto approval, you can contact the Office of Research Ethics at ethics.review@utoronto.ca or 416-946-3273 if you have any questions about the approval or rights of participants.

Thank you for taking the time to consider participating in this research project. Please contact me by phone at 905-691-1603 or email sarahk.gray@utoronto.ca, or my supervisor, Dr. Margaret MacNeill, by phone at 416-978-0598 or email margaret.macneill@utoronto.ca, if you have further questions or concerns. If you agree to participate, please sign the attached form. An extra copy of this form has been provided for you to keep for your records.

Sincerely,

Sarah Gray
Ph.D. Candidate, Department of Exercise Sciences, University of Toronto
Investigator
905-691-1603
sarahk.gray@utoronto.ca
I, ____________________________, agree to take part in the study “Staff and Students’ Understanding of Gender in Health and Physical Education” which is examining the creation, interpretation, delivery and actualization of physical education policies in Ontario secondary schools. As a volunteer in this study, I acknowledge that the information letter details the interview process and handling of research data. I also acknowledge that any questions I have asked have been answered satisfactorily and that I have received the contact information if I have any concerns or questions arising subsequent to the interview process.

I understand the interview will take approximately 45-60 minutes and will take place on a date and time convenient to me. I understand that I may refuse to answer any questions and that I may stop the interview at any time without any negative consequences. If I choose to withdraw, interview transcripts of my interview will be destroyed and my decision to withdraw will be kept confidential to minimize any negative perceptions from peers. I am aware that the interview will be transcribed and labeled with a code as to not identify the participant.

To protect confidentiality, only the researcher and the supervisor will have access to the initial research data. All data will be stored in a locked file drawer, in a password protected computer and/or encrypted USB key. I understand that any personal identification will be removed and my anonymity will be protected. Any comments I make that may lead to my identification will also be disguised to prevent my personal identity from being known. All research data including audiocassettes and transcripts will be destroyed five years after the completion of the research project.

I understand what this study involves and agree to participate. I have been given a copy of this consent form and an information letter.

Signature __________________________________________ Date _____________________
Appendix E

Interview Guide for School Staff

Introduction Script:
Thank you for taking the time to participate in this research study. I want to remind you that you may withdraw from this study at any time without consequence. If you choose to withdraw, no information shared during the interview will be used in the study’s final analysis. You may refuse to answer any question or ask clarification if you do not understand. No identifying features of yourself, the school or the school board will be used when disseminating this research study.

Introductory questions:
What are your current responsibilities in your position as within the school board?
How long have you been in your position?
What was your previous educational experience before this position?
Why did you get into the education field as a career?

School Policy Implementation:
What is the process for the implementation of a new policy within the school?
Do you receive any support (in the form of money, resources) or training before the implementation of a policy?

Health and Physical Education Policies:
Please describe your role in implementing provincial or board physical education policies within the school.
Who are the key players in the implementation of physical education policy at the school level?
What physical education policies have been implemented in your school in the past five years?
What are the key objectives of these policies?
What are the key messages of these policies?
Physical activity was once the priority of physical education policy, and the shift has since turned to nutrition. Why has this change occurred?
Outside of physical education classes, is physical activity promoted in your school?
What impacts has the new nutrition policy had on the school environment?
   Prodding questions:
   • Do more students leave the school for lunch?
What impact has the new nutrition policy had on students?
   Prodding questions:
   • Are more students late for class after lunch?
**Sex and Gender Questions:**
Do you think the current physical education policies suit the needs of all students?
   Prodding questions:
   • Why? Why not?

Do boys and girls experience physical education differently?
   Prodding questions:
   • What are your observations?

Are there discussions among staff about differences between young men and young women?

Are there any differences in how your school implements policies for young men versus young women?
   Prodding questions:
   • Are there different activities offered?
   • Are there differences in performance or skill expectations?
   • Are different resources made available to young men or young women?
   • Are there differences in the emphasis on educational objectives of the policies or curriculum?
   • Are there differences between the extracurricular activities for young men or young women?

Have you noticed differences in the delivery of physical education policies between male and female staff?
   Prodding questions:
   • Do male or female teachers speak differently to young men or young women?
   • Do male or female teachers have different expectations based on ideas surrounding physical abilities between young men or young women?
   • Are there differences in the celebration of young women versus young men as athletes?

**Future:**

Are there any changes you would make to current physical education or health education policies?

Are there any new policies you would implement?

Who else would you suggest I speak with about the health and physical education policies at the school or school board level?
Appendix F

Interview Guide for School Cafeteria Staff

**Introduction Script:**
Thank you for taking the time to participate in this research study. I want to remind you that you may withdraw from this study at any time without consequence. If you choose to withdraw, no information shared during the interview will be used in the study’s final analysis. You may refuse to answer any question or ask clarification if you do not understand. No identifying features of yourself, the school or the school board will be used when disseminating this research study.

**Introductory questions:**
What are your current responsibilities in your position as within the school cafeteria?

How long have you been in your position?

What was your previous experience in the food industry before this position?

**School Policy Implementation:**
What is the process for the implementation of a new policy within the school?

Do you receive any support (in the form of money, resources) or training before the implementation of a policy?

**Health and Physical Education Policies:**
Please describe your role in implementing provincial or board nutrition policies within the school.

Who are the key players in the implementation of nutrition policy at the school level?

What nutrition policies have been implemented in your school in the past five years?

What are the key objectives of these policies?

What are the key messages of these policies?

How are the policies implemented?

Are there differences in implementation for staff or students?

What impact has the new nutrition policy had on students and their purchasing habits?

**Prodding questions:**
- Are fewer students eating at the cafeteria?
- Are there certain products that sell more than others?
- Does less school staff use the cafeteria?

What are your top 5 items that are purchased at the cafeteria? Do these items differ from before the policy was implemented?
Have there been any staff or student complaints since the implementation of the Healthy Food for Health Schools Policy?
   Prodding questions:
   • What is the range of complaints?
   • Has there been any support from the school board or your company to handle any complaints?

**Sex and Gender Questions:**
Do you think the current nutrition policies suit the needs of all students?
   Prodding questions:
   • Why? Why not?

Do boys and girls purchase different foods?

Do boys and girls have different purchasing habits?
   Prodding questions:
   • Are there differences in the time of day girls or boys purchase foods?
   • Are girls or boys more likely to purchase foods with their friends?
   • Are girls or boys influenced by their friends’ purchases?

**Future:**
Are there any changes you would make to current nutrition policies?

Are there any new policies you would implement?

Are there any changes you would make to the operation of the school cafeteria?

Who else would you suggest I speak with about the nutrition policies at the school or school board level?
Appendix G

Interview Guide for School Board Instructional Program Leader in Health and Physical Education

Introduction Script:
Thank you for taking the time to participate in this research study. I want to remind you that you may withdraw from this study at any time without consequence. If you choose to withdraw, no information shared during the interview will be used in the study’s final analysis. You may refuse to answer any question or ask clarification if you do not understand. No identifying features of yourself, the school or the school board will be used when disseminating this research study.

Introductory questions:
What are your current responsibilities in your position as within the school board?

How long have you been in your position?

What was your previous educational experience before this position?

Why did you get into the education field as a career?

School Policy Implementation:
What is the process for the implementation of a new policy within the school?

Do you receive any support (in the form of money, resources) or training before the implementation of a policy?

Physical Education Policies:
Please describe your role in implementing provincial or board physical education policies within the school.

Who are the key players in the implementation of physical education policy at the school level?

What physical education policies have been implemented in your school in the past five years?

What are the key objectives of these policies?

What are the key messages of these policies?

Physical activity was once the priority of physical education policy, and the shift has since turned to nutrition. Why has this change occurred?

Outside of physical education classes, is physical activity promoted in schools or within the board?

What impacts has the new nutrition policy had on the school environment?

Prodding questions:
• Are more students leaving the school environment for lunch?

What impact has the new nutrition policy had on students?
Prodding questions:
  • Are students eating differently?

**Sex and Gender Questions:**
Do you think the current physical education policies suit the needs of all students?
  Prodding questions:
  • Why? Why not?

Do boys and girls experience physical education differently?
  Prodding questions:
  • What are your observations?

Are there discussions among staff about differences between young men and young women?

Are there any differences in how your school implements policies for young men versus young women?
  Prodding questions:
  • Are there different activities offered?
  • Are there differences in performance or skill expectations?
  • Are different resources made available to young men or young women?
  • Are there differences in the emphasis on educational objectives of the policies or curriculum?
  • Are there differences between the extracurricular activities for young men or young women?

Have you noticed differences in the delivery of physical education policies between male and female staff?
  Prodding questions:
  • Do male or female teachers speak differently to young men or young women?
  • Do male or female teachers have different expectations based on ideas surrounding physical abilities between young men or young women?
  • Are there differences in the celebration of young women versus young men as athletes?

**Future:**

Are there any changes you would make to current physical education or health education policies?

Are there any new policies you would implement?

Who else would you suggest I speak with about the health and physical education policies at the school or school board level?
Appendix H

Interview Guide for System Principal

Introduction Script:
Thank you for taking the time to participate in this research study. I want to remind you that you may withdraw from this study at any time without consequence. If you choose to withdraw, no information shared during the interview will be used in the study’s final analysis. You may refuse to answer any question or ask clarification if you do not understand. No identifying features of yourself, the school or the school board will be used when disseminating this research study.

Introductory questions:
What are your current responsibilities in your position as within the school board?

How long have you been in your position?

What was your previous educational experience before this position?

Why did you get into the education field as a career?

School Policy Implementation:
What is the process for the implementation of a new policy within the school?

Do you receive any support (in the form of money, resources) or training before the implementation of a policy?

Physical Education Policies:
Please describe your role in implementing provincial or board physical education policies within the school.

Who are the key players in the implementation of physical education policy at the school level?

What physical education policies have been implemented in your school in the past five years?

What are the key objectives of these policies?

What are the key messages of these policies?

Physical activity was once the priority of physical education policy, and the shift has since turned to nutrition. Why has this change occurred?

Outside of physical education classes, is physical activity promoted within the board?

What impacts has the new nutrition policy had on the school environment?

Prodding questions:
• Do more students leave the school for lunch?

What impact has the new nutrition policy had on students?
Prodding questions:
- Are more students late for class after lunch?

**Sex and Gender Questions:**
Do you think the current physical education policies suit the needs of all students?
Prodding questions:
- Why? Why not?

Are you aware of any sex-based differences that exist within physical education policies in the board?

Do boys and girls experience physical education differently?
Prodding questions:
- What are your observations?
- Are these differences acknowledge or accounted for by the school board?

Are there discussions among staff about differences between young men and young women?

Are there any differences in how the board implements policies for young men versus young women?
Prodding questions:
- Are there different activities offered?
- Are there differences in performance or skill expectations?
- Are different resources made available to young men or young women?
- Are there differences in the emphasis on educational objectives of the policies or curriculum?
- Are there differences between the extracurricular activities for young men or young women?

**Future:**

Are there any changes you would make to current physical education or health education policies?

Are there any new policies you would implement?

Who else would you suggest I speak with about the health and physical education policies at the school or school board level?
Appendix I

University of Toronto Ethics Approval

PROTOCOL REFERENCE # 28666

March 13, 2013

Dr. Margaret MacNeill  Ms. Sarah Gray
FACULTY OF KINESIOLOGY AND PHYSICAL  FACULTY OF KINESIOLOGY AND PHYSICAL
EDUCATION  EDUCATION

Dear Dr. MacNeill and Ms. Sarah Gray,

Re: Your research protocol entitled, "Staff and students' understanding of gender in health and physical education"

<table>
<thead>
<tr>
<th>ETHICS APPROVAL</th>
<th>Original Approval Date: March 13, 2013</th>
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<tbody>
<tr>
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<td>Expiry Date: March 12, 2014</td>
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<td>Continuing Review Level: 1</td>
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We are writing to advise you that the Health Sciences Research Ethics Board (REB) has granted approval to the above-named research protocol under the REB’s delegated review process. Your protocol has been approved for a period of one year and ongoing research under this protocol must be renewed prior to the expiry date.

Any changes to the approved protocol or consent materials must be reviewed and approved through the amendment process prior to its implementation. Any adverse or unanticipated events in the research should be reported to the Office of Research Ethics as soon as possible.

Please ensure that you submit an Annual Renewal Form or a Study Completion Report 15 to 30 days prior to the expiry date of your current ethics approval. Note that annual renewals for studies cannot be accepted more than 30 days prior to the date of expiry.

If your research is funded by a third party, please contact the assigned Research Funding Officer in Research Services to ensure that your funds are released.

Best wishes for the successful completion of your research.

Yours sincerely,

[Signatures]
Appendix J
Letter of Approval to School Principal

UNIVERSITY OF TORONTO
FACULTY OF KINESIOLOGY & PHYSICAL EDUCATION

Project Title: Staff and Students’ Understanding of Gender in Health and Physical Education
Investigator: Sarah Gray (Ph.D. candidate, Graduate Department of Exercise Sciences, University of Toronto)
Supervisor: Margaret MacNeill (Associate Professor, Faculty of Kinesiology & Physical Education)

April 1, 2013

Dear School Principal,

I am a Ph.D. candidate at the University of Toronto in the Faculty of Kinesiology and Physical Education, as well as an Instructional Program leader with the _______ District School Board. For my doctoral thesis, I am conducting a research study to explore the opinions of both staff and students regarding physical education and nutrition policies within the school environment.

This study will involve focus groups with students in relation to their experiences in physical education as well as their thoughts about physical education programs. I will be recruiting Grade 9-12 students to participate in focus groups. The focus groups will ask specific questions about how particular aspects of the polices affect students’ experiences, behaviours as individuals as well as young men and young women within and outside the school environment. The questions will also examine whether differences exist between young men and women in relation to their thoughts about and their experiences in physical education. The focus groups will be conducted during the lunch hour. This research will not interfere with instructional time except for a brief (five minute) classroom visit to invite participants to participate. Students will be provided with pizza for lunch during their focus group.

There will be no formal interactions with your staff and the study will not interfere or inconvenience any activities during the school day. Classroom visits to recruit participants will be arranged around the teachers’ schedules if and when they are willing to allow me into their classroom.

In appreciation of your school’s participation in the study, I am willing to conduct workshops for teachers’ professional development and/or students’ learning, and will offer an executive report with respect to the study findings.

Information gained from this research may be used in future professional presentations or publications. However, the name of the school and the school board will not appear in any research reports and the students’ identities will remain anonymous.

I recognize that your staff is very busy and I assure you that I will not require much of their time. I have been in contact with the teaching staff who have indicated that they are potentially interested in participating and are supportive of this research. I hope you will agree to allow this research to be conducted in your school.
The _____ District School Board Research Advisory Committee and the University of Toronto Ethics Board (approval # 28666) have approved this research project, copies of both approvals are included. If you have any questions about the University of Toronto approval or the rights of participants, you can contact the Office of Research Ethics at ethics.review@utoronto.ca or 416-946-3273.

Thank you for taking the time to consider allowing your school to participate in this research project. I will gladly meet with you at your convenience to answer any questions. Please contact me by phone at 905-691-1603, or by email at sarah.gray@utoronto.ca to inform me of your response with respect to this research study request. If you have any questions or concerns please contact myself or my supervisor, Margaret MacNeill, by phone at 416-978-0598 or email margaret.macneill@utoronto.ca.

Thank you in advance for your time and consideration,

Sarah Gray  
Ph.D. Candidate, Faculty of Kinesiology and Physical Education, University of Toronto,  
55 Harbord St, Toronto, ON, M5S 2W6  
905-691-1603

I,__________________________, agree to the participation of _________ High School in Sarah Gray’s research entitled “Staff and Students’ Understanding of Gender in Health and Physical Education.” I have received information outlining the details of the study and support the conduct of the research on the school’s premises.

I acknowledge that the research involves focus groups, which will be conducted with interested students. This research project should not interfere with any regularly scheduled academic or athletic activities. I acknowledge that this information is provided in further detail in an information letter attached. I also acknowledge that any questions I have asked have been answered satisfactorily.

As the school principal, I support the participation of _________ High School in this research project.

Signature ___________________________ Date ___________________
Appendix K

Script for Classroom Participant Recruitment

Hi.

My name is Sarah Gray and I am a doctoral student in the Faculty of Kinesiology & Physical Education at the University of Toronto studying physical education policies. I am conducting a research study to explore the opinions of both staff and students regarding physical education and nutrition policies within the school environment.

I am looking at the differences in the experiences of Grade 9 students in physical education classes and with physical education policy. I want to compare the experience of young men and young women. If you are interested in participating, you would be part of a focus group to discuss your thoughts, opinions and experiences in physical education. The focus groups will occur at the school during the lunch hour and will last approximately 45 minutes. In appreciation, you will be offered pizza for lunch.

If you are interested in participating, please take this information package home to your parents and discuss your participation with them. You will need to return the parental/guardian consent form and your assent form to the labeled box in the main office. You are too young to legally sign the consent form; however, the assent form indicates to my research office that (with parent consent), you agree of your own free will to be part of this research and are not being pressured into it. I will contact you at a later time about setting up a time for your focus group.

Thank you for your time and consideration.