

Exploring the Factors that Influence Female Students' Decision to (Not) Enrol in Elective Physical Education: A Private School Case Study

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This article presents the results from a qualitative case study that examined the influencers upon a somewhat unique group of female students who opted out of elective physical education (PE). More specifically, this study focused upon female students attending an affluent private school, investigating why—when they transitioned from middle school to senior high school and PE became optional—they opted out of the class. Employing a research design that relied principally upon in-depth interviews, seven themes emerged from the students' stories: perspectives on policy and PE programming, co-ed problems; friends' influence, parental support for opting out, A+ academic achievement, free time and electives, and adequate physical activity accumulation outside of school. By considering these themes, particularly as they align with an Ecological Systems Theory (EST) social-ecological framework (Bronfenbrenner, 1977), it is possible to more fully comprehend contributing influencers to these students' decisions. Moreover, with this comprehension, we offer suggestions for future practice and inquiry.

Cet article présente les résultats d'une étude de cas qualitative qui a examiné les facteurs qui influencent un groupe quelque peu unique d'étudiantes qui avaient choisi de ne pas s'inscrire au cours d'éducation physique facultatif. Plus précisément, cette étude porte sur les raisons pour lesquelles les étudiantes d'une école privée pour familles aisées, lors de leur transition de l'école élémentaire vers l'école secondaire où le cours d'éducation physique est dorénavant facultatif, ont décidé de ne pas s'y inscrire. La recherche repose sur une conception qui s'appuie principalement sur les entrevues détaillées. Sept thèmes découlent des récits des étudiantes : des perspectives sur la politique et la programmation du cours d'éducation physique; des problèmes liés aux cours mixtes; l'influence des amis; l'appui parental devant le choix de ne pas s'inscrire; une rendement académique de A+; le temps libre et les cours facultatifs; et suffisamment d'activité physique à l'extérieur de l'école. L'étude de ces thèmes et notamment la mesure dans laquelle ils correspondent à la Théorie des systèmes écologiques (Bronfenbrenner, 1977) aide à mieux comprendre les facteurs qui influencent les décisions de ces étudiantes. Nous appuyant sur ces conclusions, nous offrons des suggestions pour la pratique et la recherche à l'avenir.

Physical education (PE) has a storied history of gender inequity within Canadian school communities (Mandigo, Corlett, & Lathrop, 2012; Robinson, 2013). For example, and notwithstanding the potential of contemporary efforts to focus upon physical literacy, in practice,

PE teachers invariably ascribe a disproportionate amount of their instructional time to sport experience (Mandigo et al., 2004; Randall, Robinson, & Fletcher, 2014). This sport-techniques focus (Kirk, 2010) has been found to privilege male students at the expense of female students (Flintoff & Scranton, 2006; Penney & Evans, 1999). Additionally, there is no shortage of research evidence suggesting that female students report having negative experiences in PE and that these experiences contribute to lower rates of involvement in PE throughout adolescence (Couturier, Chepko, & Coughlin, 2005; Gibbons, 2009; Gibbons & Humbert, 2008; Robinson, 2012). Research literature related to female students' disengagement from PE often suggests that the key problems lie with PE's content and pedagogies (e.g., see Couturier et al., 2005; Fisette, 2011; Flintoff & Scranton, 2006; Gibbons & Gaul, 2004; Gibbons & Humbert, 2008; Hastie, 1998; Humbert, 2006; Robinson, 2012).

This burgeoning body of evidence is having some impact upon PE programs across Canada and other Western nations. For example, in recent years a number of purposeful sex- and gender-responsive measures and classes have been introduced into some schools' PE programs (e.g., see Enright & O'Sullivan, 2010, 2012a, 2012b; Felton et al., 2005; Kirk, Fitzgerald, Wang, & Biddle, 2000; Robinson, 2013). Relatedly, Oliver and Kirk (2015), in response to nearly half a century of theorizing and intervention, have suggested a programme of action characterized by student-centred pedagogy, critical study of embodiment, inquiry, and listening and responding to female students.

Such efforts have certainly been responsive to the experiences and expectations of disengaged and potentially disengaged female students. Still, and while we recognize that no two settings are ever the same, both research into female students' disengagement from PE and the resultant introduction of culturally responsive PE programs have focused, almost-exclusively, upon public school contexts. In our experiences as PE teachers and PE teacher educators, we have found the private school context to be especially unique. Most notably, our experiences have shown us that students within private schools often come from privileged backgrounds, have especially engaged parents/guardians, carry significant cultural capital, and lack the cultural and racial diversity found within most public schools. Given these common attributes, we have also noted that they most often move onto university after graduation from high school. Moreover, though these have been our own observations, research evidence suggests these are common within many similar private school contexts (Dronkers & Robert, 2008; Kirkpatrick Johnston, Crosnoe, & Elder, 2001; Lankford & Wyckoff, 2001).

It is partly for this reason that we set out to investigate factors that influence female students' decision to (not) enrol in elective PE at an affluent private school. Moreover, we took on this task because of this identified unique and understudied context but also because of our familiarity with an actual school site in our community—one that has unfortunately attracted little-to-no female students to their elective PE classes. The specific research question that guided this inquiry was, "What are the factors that influence female students' decisions to opt out of grade 10 elective PE at an independent private school?"

A Consideration of Related Literature

A brief review of literature related to female students' experiences within PE provides important contextual information as well as some insight into the milieu related to this inquiry. Consequently, we offer a brief summary of some of the most related and notable literature associated with our research topic. This overview includes literature related to the relationship

between socioeconomic status (SES) and physical activity, female students' enrolment in elective PE programs, and successful PE programs that engage and preserve students' enrolment.

Santos, Esculcas, and Mota (2004) investigated the relationship between adolescents' decisions related to organized and unorganized physical activity and their parents'/guardians' SES. The findings suggested that youth from families of higher SES chose to participate in significantly more organized activities than their lower SES counterparts. In addition, those who were involved in organized physical activity reported more moderate-intensity physical activity and a higher frequency of team activity participation, while youth who participated in more unorganized physical activities recounted more "low-intensity, moderate frequency, and individual activities" (Santos et al., 2004, p. 216).

Bengoechea, Sabiston, Ahmed, and Farnoush (2010) examined the relationship between gender, SES, weight status, and PE enjoyment with organized and unorganized physical activity participation. They found that SES was related to participation in organized physical activity but not related to unorganized physical activity participation. Adolescents in the middle and high SES groups were involved more frequently in organized physical activity at school. Bengoechea et al. (2010) also noted that students in the high SES grouping were 87% more likely to be involved in organized physical activity outside of school compared to students in the low SES group. Additionally, adolescents in the middle SES group participated more frequently in organized physical activity outside of school than adolescents in the low SES group. There was a significant association between PE enjoyment and participation in organized and unorganized physical activity among adolescents. Students who participated more frequently in both organized and unorganized physical activity reported higher levels of enjoyment in PE. With respect to gender differences, female students participated in unorganized physical activity less frequently than did male students inside and outside of school. Conversely, female students participated in organized physical activities at similar rates as male students.

Bohr, Brown, Laurson, Smith, and Bass (2013) investigated the effect of SES on physical fitness among junior high school students. They found that SES was a significant indicator of physical fitness for female students in all areas except for the FITNESSGRAM sit-and-reach test. Female students of low SES were on average 2.2 times less likely than female students of high SES to achieve the Healthy Fitness Zone standards (Bohr et al., 2013). Bohr et al. suggested "that perhaps boys are more likely to engage in physical activity regardless of SES than girls. It may be possible that girls engage in physical activity more in the form of organized sport, and that this participation may be more encouraged in girls from higher SES groups" (2013, p. 545).

Hobin, Leatherdale, Manske, Burkhalter, and Woodruff (2010) found students who attended senior high schools with higher median household incomes were less likely to enrol in PE. They noted, "students attending schools in higher socioeconomic neighborhoods may also experience different academic pressures from parents/guardians to study subjects considered more academic than PE" (Hobin et al., 2010, p. 451); they suggested further examination is required to better understand this finding. Hobin et al. concluded, "PE enrollment patterns in Ontario high schools are determined by a complex interplay of variables from multiple domains. Consistent with the social-ecological model, our findings suggest that future interventions may need to address students and/or school characteristics from different domains" (2010, p. 450).

Gibbons and Humbert (2008) conducted a study that investigated female students' disillusionment within PE. Four main themes emerged from their data. The first theme suggested female students have a desire for a "wider variety of physical activity offerings in their PE programs including lifetime activities" (Gibbons & Humbert, 2008, p. 180) instead of a heavy

emphasis on irrelevant team sports. The second theme suggested that female students need and desire to feel personal competence in their physical skills during activities and games. The third theme suggested female students might have negative opinions of PE. The fourth theme emphasized the female students' need to be part of a positive learning environment that is free of harassment and intimidation from their male counterparts.

Sulz, Humbert, Gyurcski, Chad, and Gibbons (2010) found many female students had peers who had a direct influence in their decisions to opt out of elective PE. More specifically, many chose to enrol or not enrol based on the decisions made by their close friends about enrolment. Similarly, Dwyer et al. (2006) found that female students felt pressured by their friends to do things other than physical activity.

Whitehead and Biddle (2008) found many inactive female adolescents held strong stereotypical views related to feminine appearance and actions, and that these views prevented them from engaging in exercise or physical activity. The students explained that being feminine entailed being more concerned about their appearance and clothing than with exercise or physical activity (Whitehead & Biddle, 2008). Furthermore, many of these female students were reluctant to become active in physical activity, explaining that they did not want to get sweaty. Likewise, Couturier et al. (2007) and Vu, Murrie, Gonzalez, and Jobe (2006) found that one of the most striking differences between female and male students was the degree to which female students identified social issues as barriers to participation in PE. These barriers included discomfort with changing, time to shower and change, and getting sweaty.

Gibbons (2009) examined the features of high school PE programs in British Columbia that successfully retained female student enrolment levels. The successful high school courses in this study placed an "emphasis on lifetime physical activities and value-added options," and value-added options (e.g., certifications and training related to first aid/CPR and fitness leadership) also appealed to female students (Gibbons, 2009, p. 228). Successful programs afforded opportunities for students to be involved in the creation of course development and served to add meaning and ownership for participants. Gibbons indicated that "teachers viewed this opportunity for input as an important progression for students toward learning how to make adult decisions" (2009, p. 230).

Lodewyk and Pybus (2013) investigated factors relating to the retention high school students in PE once it becomes optional in grade 11. Results of the inquiry indicated that a substantial number of students chose not to enrol in elective PE due to factors outside of PE. Some examples of these external factors included "PE being fully enrolled so not available, PE not fitting into their timetable or schedule, and PE not meeting a graduation requirement, career goal, or a personal need for physical activity" (Lodewyk & Pybus, 2013, p. 73). Furthermore, the non-enrolees reported having more social concerns, less domain value (i.e., placing less value on the importance of PE), and dislike for certain activities involving competition, fitness, and health education.

Research Framework, Methodology, and Methods

Aligning the research design with an Ecological Systems Theory (EST) social-ecological framework (Bronfenbrenner, 1977), we made initial and subsequent efforts to view and understand female students' decisions as they align with multiple domains of influence. With this framework, as well as the research question and end-results we were after, we chose a qualitative research design. Applying a case study methodology, we employed individual interviews as a source of data collection. Following, then, is an overview of our application of EST as it relates to

this study, our case study design, as well as our research methods.

Ecological Systems Theory

Students, as are all humans, are subject to multiple domains or systems of influence. Bronfenbrenner (1977) understood this and suggested that understanding human development and action “requires examination of multiperson systems of interaction not limited to a single setting and must take into account aspects of the environment beyond the immediate situation containing the subject” (p. 514). The premise of the ecological environment can be envisioned as “a nested arrangement of structures, each contained within the next” (1977, p. 514). Within EST, the systems of interaction include a microsystem, mesosystem, and macrosystem.

The microsystem is “the complex of relations between the developing person and environment in an immediate setting containing that person (e.g., home, school, workplace, etc.)” (Bronfenbrenner, 1977, p. 514). This is the system whereby a person experiences the most social interactions. For instance, interactions among an individual under study and his or her immediate family would fall into the framework of the microsystem. The mesosystem encompasses interrelations among and between contexts (when there is more than one) that contain a developing person at one instance in his or her life. For example, for teenaged students, the mesosystem would include “interactions among family, school, and peer group” (Bronfenbrenner, 1977, p. 515). Finally, the macrosystem is defined as the ambient institutional configurations of the culture or sub-culture under study. Examples of a macrosystem include the “economic, social, educational, legal, and political systems” (Bronfenbrenner, 1977, p. 515) of which Microsystems and mesosystems are the concrete manifestations.

Graber, Woods, and O'Connor (2012) support the use of EST as a grounding framework “because it clearly delineates the different levels of the system and how each has the potential to influence the individual” (p. 166). Indeed, many researchers engaged within health behaviours-and physical activity-related disciplines have employed such a social-ecological approach (e.g., see Sallis, Owen, & Fisher, 2008; Spence & Lee, 2003). We chose to employ a modified version of Bronfenbrenner's EST to serve as the framework for this research, largely because of its identification of multiple domains of influence. This framework, with its multiple levels (microsystem, mesosystem, and macrosystem), served as a guide for the research question and for subsequent coding and theme generation.

Case Study

The context and nature of this research positioned it as a single case study, something that Merriam (2009) has defined as “an in-depth description and analysis of a bounded system” (p. 40). Stake (1995) also suggested qualitative case studies enable researchers to arrive at a deeper understanding of the case; he also stressed, “we want to appreciate the uniqueness and complexity of the case, its embeddedness and interaction with its contexts” (p. 16). The case study then, “is a specific, complex, functioning thing” (Stake, 1995, p. 2). The bounded system in this study was the group of grade 10 female participants within a single private school in Canada.

The uniqueness of this case ought to also be reiterated and further explained here. Base tuition fees for secondary students exceed \$17,000 per year. In addition to this base fee, there are a number of additional costs (e.g., school uniforms cost over \$400). Clearly, to us, these fees alone suggest that the school has some financial barriers that prevent many students from attending.

This is not a school for everyone. It may also be the case that with such a financial investment, parents/guardians might be looking to “get the best education” for their children—however that may be defined. Additionally, and as related to PE enrolment, this school has had especially poor results in attracting female students. For example, while Gibbons (2009) explained that in some of the worst cases in Canada fewer than 10% of female students enrol in elective PE in grade 11 (where virtually 100% are enrolled in compulsory PE in grade 10), this school has attracted only one female student to PE in elective grade 10 in the last year. Also important to note, this one lone female student was an international exchange student; no “regular” female students have enrolled in PE. When it comes to female students and enrolment in PE, it would be difficult to find a worse location. Moreover, we are uncertain if this is a standalone happening within this specific case or if it is indicative of a trend found within many or most private schools; no research data contrasting public school and private school PE enrolment can be found. We do know, however, that it is common practice for private schools in the province to offer PE as an elective in grade 10 (something no public schools are able to do).

Data Collection and Analysis

Participants. This study employed purposeful sampling, which Merriam stated “is based on the assumption that the investigator wants to discover, understand, and gain insight and therefore must select a sample from which the most can be learned” (2009, p. 77). Though various types of purposeful sampling may be used in qualitative research, we used convenience sampling. More specifically, at the beginning of the 2014-2015 school year, when course enrolment lists were finalized, we approached school administrators for data on grade 10 female students enrolled in PE (the lone female student was excluded from participation). Invitation to participate and consent/assent letters were given to the female students remaining. Six of the eligible female students agreed to participate in the study; all were subsequently involved as research participants.

Individual interviews. Creswell (2012) suggested that it is essential to collect data “based on words from a small number of individuals so that the participants’ views are obtained” (p. 16). One of the most common methods of data collection used in qualitative research case studies is the interview (Merriam, 2009). Kvale (2007) suggested

the qualitative interview is a key venue for exploring the ways in which subjects experience and understand their world. It provides a unique access to the lived world of the subjects, who in their own words describe their activities, experiences, and opinions. (p. 9)

In an attempt to answer the research question, we gathered descriptive-rich data and stories by conducting semi-structured, in-depth, individual audio-recorded interviews. The rationale for not using focus group interviews was to ensure that all of the participants’ experiences were shared with the researchers without the influence of their peers’ suggestions. Moreover, given the age of the participants, we aimed to minimize potential issues related to ensuring confidentiality and anonymity.

A total of 19 questions were included in the interview guide. However, given the nature of semi-structured interviews, a number of additional (related and unrelated) questions were added during the course of the interviews. The majority of these 19 questions were aligned with the various systems of interaction. Sample questions included the following:

Table 1

Percent of Agreement for Coded Data

Participant	Total # of coded statements	Initial agreement	Subsequent agreement	Disagreement	Discarded statements
Emily	70	$39/70 = 56\%$	$69/69 = 100\%$	0	1
Rosa	46	$37/46 = 80\%$	$46/46 = 100\%$	0	0
Ava	48	$40/48 = 83\%$	$46/46 = 100\%$	0	2
Izabella	32	$25/32 = 78\%$	$32/32 = 100\%$	0	0
Lin	30	$27/30 = 90\%$	$30/30 = 100\%$	0	0
Lily	30	$26/30 = 87\%$	$29/29 = 100\%$	0	1

- Physical Education in Grade 10 is mandatory in the Province of Nova Scotia but this school's policy does not require students to take PE. What do you think about that? (An example of an EST macrosystem-targeting question)
- What did your parents/guardians think about your decision not to sign up for PE? What did your academic advisor think? (An example of an EST mesosystem-targeting question)
- Did university or future job aspirations have any impact on your decisions about signing up for PE? If so, how? (An example of an EST microsystem-targeting question)

Interviews took approximately forty-five minutes to one hour each and were carried out during the lunch hour or after school in a quiet space with few distractions. After verbatim transcriptions of the audio-recorded interviews were finalized, member-checks (Creswell, 2003) were also completed.

Data analysis. Transcribed interviews were read several times by the primary investigator until themes began to emerge from the data. Once confident with the initial themes, codes were created to reflect these themes. In an effort to ensure credibility and confirmability, all applicable interview statements were coded by the second researcher to determine the degree of agreement. The researchers engaged in a number of discussions about different coding results until a 100% agreement on all coded statements was achieved. These discussions occurred after each participant's responses were coded (this is why the agreement rates generally improved for each participant). This process also required a small number of coded statements to be discarded or combined; additionally, two themes were combined into a single theme. While initial coding comparisons had agreement rates ranging from 56% to 90%, subsequent agreement rates were 100% (see Table 1).

Results and Discussion

Attending to the social-ecological framework, seven themes emerged from the participants' stories: perspectives on policy and PE programming, co-ed problems, friends' influence, parental support for opting out, A+ academic achievement, free time and electives, and adequate physical activity accumulation outside of school (see Figure 1). Some of these themes clearly support and

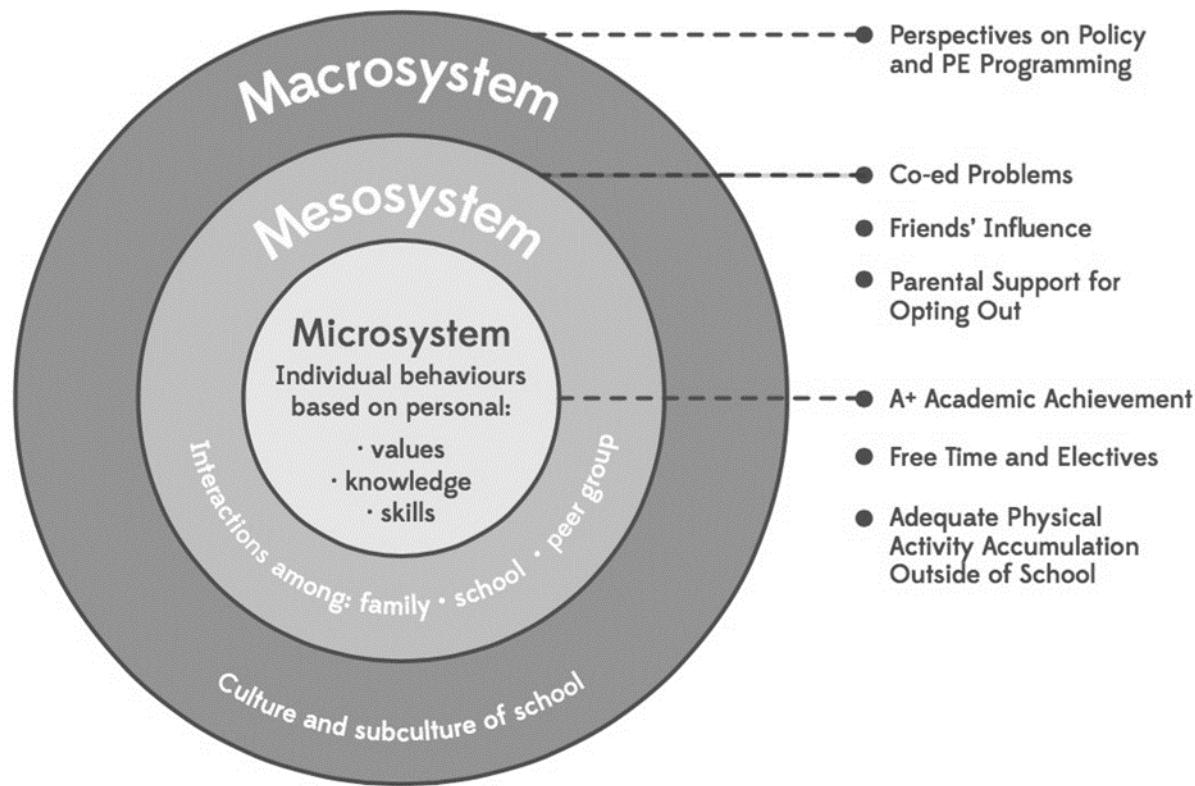


Figure 1. Bronfenbrenner's (1977) social-ecological model as it relates to physical education enrolment among female students at a private school.

augment a robust body of research literature within different or undefined contexts (i.e., co-ed problems, friends' influence, free time and electives). Others provide new information related to somewhat limited and tangentially related literature in the field (A+ academic achievement, adequate physical activity accumulation outside of school). Finally, two others are especially new and, perhaps, more unique to this case and context (i.e., perspectives on policy and PE programming, parental support for opting out).

Macrosystem Influences

The macrosystem, which seeks to identify the ambient institutional configurations of the culture or sub-culture under study, encompasses the outermost level of influence on participants' decision to opt out of PE. With regards to the context of this study, the macrosystem includes perspectives on policy and PE programming.

Theme 1: Perspectives on policy and PE programming. Participants were asked to reflect upon their opinions related to the policies and PE programming at their school. All of the participants were asked to consider the fact that their school has elective grade 10 PE while students within the rest of the province must take the course. This idea came as a surprise to many. Ava, Rosa, and Izabella had mixed feelings about the possibility of having mandatory PE in grade 10. Ava supposed, "I think honestly, if PE had been mandatory that would be good but bad at the same time." Since her experiences in PE were somewhat negative, she thought mandatory PE would be a bad idea. However, she also thought that the definition of "mandatory"

would take on a new meaning since the rest of the province is required to take it. She concluded, “I think it is kind of stupid that we don’t have it actually” (Ava). Furthermore, Rosa suggested, “I think it is good to have the option but maybe if it was mandatory in grade 10, I think that would be good because grade 11 and 12 is when the IB starts and that is when academics really matter.” Rosa’s comment welcomes the idea of mandatory PE for grade 10, but suggests that the academic nature of the school may cause issues.

Likewise, Emily expressed concern for being able to manage her time in high school: “I think part of it is a time thing for our school so that is why we should be able to choose, because a lot of people feel like they do not have the time and that is why they do not take gym.”

We found Emily’s thought about time management to be interesting, especially because we know how busy some of the students at the school are. Ironically, we also recognize that the perception of a lack of time probably stems from the fact that the administrators have not made time in the schedule for all students to take the PE course in grade 10.

Finally, Lin felt more positively about the possibility of making PE mandatory in grade 10, offering:

I think it would be better if more students were required to take PE because a lot of people don’t get the exercise they need in their day, and going from six classes a day where you are sitting down and they don’t even get a chance to stand up and be active. I see why most schools in Nova Scotia make it mandatory.

Lin’s insight reminds us that PE offers a unique opportunity for students to limit sedentary time during their school day and that providing opportunities to move is a valued aspect of her educational experience and, thus, highlights the need for administrators to place higher value on PE and promote it at the high school level—especially among female students. This mirrors the recommendations provided by Active Healthy Kids Canada (2013) as well as Rey-Lopez et al.’s research (2008), which both suggested that PE classes provide a means to minimize sedentary time throughout the day.

These observations are, in many ways, entirely unique and specific to the private school context. That is, this is a de facto non-issue for all public schools in the province—where PE is compulsory in high school. It is only because these students attend a private school that has the privileged ability to ignore “regular” graduation requirements that students are able to begin opting out a full year younger than most students in the province. It is also noteworthy that although these students do not have to take PE in grade 10, most suggested that its potential compulsory inclusion, as is the case in almost every other school in the province (and nation), would be a somewhat welcome happening.

The participants were also asked how they felt about accessing community facilities, such as rock climbing walls and swimming pools, to improve their PE experience. When it came to accessing community facilities, all of the female students indicated that it would have increased their desire to sign-up for the course. Emily said, “I think I probably would have taken gym if I had known there were options like that” while Lily mentioned, “When we did that bike trip two years ago, that was a lot of fun because we got time outside the school and we got to be in the fresh air.” Similarly, Lin reflected, “I think I would be a lot more interested in taking gym because I really like doing new things and having experiences like that.” We were quite interested by Lin’s response because, in addition to mentioning her desire to try new physical activities, she indicated that there was extra value to be gained from such experiences.

The participants were also asked to speak about the activities they would most like to see in PE. Rosa suggested, “In my opinion, I think it would be more trying to get individually what people are interested in.” Lily added, “When we did smaller units like gymnastics and dance units, I was a bit better at those because those are more suited to what I am good at.” It was thought provoking to hear Lily indicate that the units she was best at were the shortest units being offered. Perhaps her experiences in PE could have been more positive if her favourite activities had been covered in more depth.

While not all of the ideal physical activities mentioned by participants above were non-traditional lifetime activities, it is important to note that several of them were. This is consistent with previous research by Gibbons and Humbert (2008), Gibbons (2009), and Felton et al. (2005). That is, they too also found that non-traditional lifetime activities provide positive experiences for female students and, as a result, may serve to better engage and retain female enrolment in PE.

Mesosystem Influences

The mesosystem, which is the level of influence that seeks to identify influences related to female students’ decisions to opt out of elective PE, are based on interactions among family, school, and peer group. The mesosystem in this study includes co-ed problems, friends’ influence, and parental support for opting out.

Theme 2: Co-ed problems. A variety of co-ed problems came to light during a consideration of the data. Participants in this study indicated that male peers could be intimidating, they had a preference for female PE teachers, and they harboured a desire for a female-only PE class. Lily shared:

I don’t think I would be comfortable doing it [PE] with the boys and I think it is better having a girl as a teacher because you feel more comfortable doing the exercises. It is easier when it is just girls because you are all friends and it is just more comfortable.

Izabella added, “The whole performing in front of boys, playing with boys is another factor. Some people have a huge problem with that and even though you are separated in grade 7-9, I don’t think that’s long enough.” These perspectives, offered by both Lily and Izabella, illustrate that feelings of discomfort are augmented in the presence of male students and lessened by the presence of female students in a PE setting. Emily believed that in the presence of male students, female students feel immense pressure to be successful and that it turns them off of PE. She shared, “I think if they feel a lot of pressure to be really physically active and successful at being physically active, which is a lot of what girls don’t like about PE” (Emily). Ava added to this point, “If you mess up once, they assume you are just a mess up always. You miss the ball once, you’ll never get it again.” These insights offered by Emily and Ava speak to the environment that exists in many co-ed PE classes throughout North America and are consistent with the accounts of many other female students in related research. We believe such results and effects upon female students are related to two related happenings. First, and as these students were sure to share, it is true that male students have been found to have these sorts of effects upon many female students within PE (Gibbons & Humbert 2008; Humbert, 2006; Robinson, 2012). Second, however, is our belief that PE pedagogy has a history of gender privilege, characterized by PE-as-sport techniques—something much more appealing to many more male students than female

students. (Flintoff & Scranton, 2001; Kirk, 2010; Robinson, 2013). Interestingly, Emily suggested one way that female students could become more comfortable in a co-ed PE setting. She said, “present it to girls as a more female-friendly environment where the pressure is not on them as much as they probably feel like it is” (Emily). However, she recognized that it would take more than that to really make a difference:

I think the boys should be more inviting. The boys should make the girls feel like they are welcome in the gym class. I think that for a lot of reasons the boys should be talked to about respecting girls and treating them as equals more. Just telling them how important it is to be kind to each other in that kind of situation because girls are often a lot more insecure about their physical abilities. (Emily)

Emily’s vision for the cultivation of an ideal environment for female students in a co-ed PE class is not an extravagant request and should be taken seriously by PE teachers. The class climate is set and reinforced by the teacher and should address issues related to equality and kindness between and among male and female students. That is, in the event that female students are unable to be afforded opportunities to participate in separate female-only PE classes, PE teachers need to be aware of the manifestations of such problematic dynamics within co-ed classes so that they can play a purposeful role in preventing and addressing them.

When it came to the preference of male or female PE teachers, four of the six participants reported that they would prefer having a female teacher. Lily explained, “In gym, it is a lot about your body and what you can do and I just feel more comfortable around a female teacher.” Emily considered the difference between male and female teachers, offering, “I have never found that boys are particularly uncomfortable with female teachers but I have found that it is a lot more of a chance of girls being uncomfortable with a male teacher.” Having a female PE teacher that understands if they are not feeling up to it or have female-related issues, would enable a comfortable environment for the female students involved in this study.

When asked if they would prefer co-ed or single-sex PE, all female students but one expressed their desire for female-only PE. Lin, who is in favour of female-only PE suggested,

Having people to encourage you, your girl classmates and teachers, really influences your attitude in gym a lot and if they are really encouraging when you miss a ball or something and they are like ‘it’s okay, just try again’ it makes you want to keep trying and not give up ... I think having a girl’s gym class separated from the boys would really make the girls more comfortable and they might want to work harder because they would not be embarrassed to try.

As Lin highlights, the majority of female students showed preference for female-only PE, citing that they would feel more comfortable and supported in that type of environment. This finding supports prior research related to providing meaningful single-sex PE experiences (e.g., Gibbons, 2009; Gibbons and Humbert, 2009; Felton et al., 2005).

Theme 3: Friends’ influence. Most participants within this case study expressed that their female friends influenced their decision to opt out of PE. Emily noted the influence of friends as being “a peer pressure thing” because none of the female students ended up enrolling in the course. Emily further shared, “I heard a lot of that...you are not taking it, so I don’t want to take it either.” This observation might suggest that friends have the capacity to discourage or encourage female students’ involvement in PE. To that point, Ava suggested, “I feel that honestly, if one of my friends had come out and said ‘I’m going to take it,’ there might have been a possibility that

other people would have, a chain reaction maybe." Likewise, Rosa mentioned her thoughts on the importance of having friends in PE class. She expressed, "If a lot of girls were taking it [PE], then I would reconsider. If it was just one or two, I don't think so" (Rosa). She added:

Many of my close friends did not take it and a lot of the reasons that I liked gym was because I got to hang out with my friends in the gym environment, which was really nice so when I found out my friends were not taking it, I was like well it might be kind of boring for me. (Rosa)

As Rosa's comment suggests, female students' enjoyment within PE is positively affected by the presence of their friends. This finding was supported by Felton et al.'s (2005) research, which recognized the importance of the social-emotional dimension and highlighted that support from peers was a major factor in the promotion of PE participation among female students transitioning from junior high school to senior high school.

Theme 4: Parental support for opting out. The female students in this study were asked to reflect on their parents'/guardians' thoughts regarding their PE enrolment. The results indicated that all but one parent supported their daughters' decision to opt out of elective PE. Emily's father was the only parent who believed that she should be enrolled in the PE course. This opinion was reflected in Emily's statement: "My mom thought I should focus or use my frees to do a lot of homework and my dad was a bit against me not taking gym because he felt that I should be engaging in as much physical activity as possible." As Emily suggests, her parents had two conflicting ideas about how she should be spending her time at school and, in the end, Emily's mother had more of an influence on her decision to opt out of PE. All of the other participants' parents/guardians demonstrated some degree of support for their decision to opt out. For example, Lin commented, "My parents were completely okay with it and they actually supported me opting out because they know how much I have trained outside of school." As well, Izabella shared, "To be completely honest, my parents did not have a huge problem with it." These perspectives highlight the fact that these students are being afforded the autonomy by their parents/guardians to make important decisions regarding their PE enrolment. Additionally, Rosa explained her parents' opinion:

They know that if they left it up to me I would still stay healthy and that they would not have to force me to take this class in order to stay healthy. They were okay with it because they know that I am very aware of my physical activity and how much I do every week.

While it is comforting to know that, in Rosa's instance, her parents trust her to be physically active and self-aware of her physical activity habits, we still find it troubling that the parents/guardians of female students are supporting their daughters' decision to opt out of PE, principally because participating in physical activity does not necessarily equate to being physically educated or physically literate.

It is concerning to us to discover that parents/guardians are not advocating for their daughters' involvement in PE and that they are essentially supporting their decision to opt out. Somewhat as anticipated, the findings of this case study mirror what was seen by Santos et al. (2010), who found that students of higher SES families are more likely to opt out of elective PE in favour of organized sport outside of school. This case study's result also adds to the research conducted by Hobin et al. (2010), which confirmed that students with higher median household incomes were less likely to enrol in PE—again presumably because they had opportunities for

organized physical activity after and outside of school (and/or because PE is less valued compared to other subjects). Though we draw such a parallel with Hobin et al., we also know that this presents additional information related to our unique context. That is, while Hobin et al. demonstrated—entirely through quantitative data collection and analysis—that a relationship exists between median household income and elective PE enrolment, they did not investigate parental support, nor did they investigate those within especially affluent private schools. What is especially important about our research, then, is that parental support for opting out was found to be one of the most salient themes related to this very occurrence. What can therefore be determined by our research is that such a relationship may be due, in part, to parents'/guardians' enabling attitudes. We would suggest that these observations may be less observable in other public school settings.

Microsystem Influences

At the core of the EST model is the microsystem, which represents influences on female students' PE enrolment that encompass individual behaviours that are based on one's own values, knowledge, and skills. Within the context of this study, the microsystem includes three major influences on female students' PE enrolment: A+ academic achievement, free time and electives, and adequate physical activity accumulation outside of school.

Theme 5: A+ academic achievement. All participants confirmed that their focus upon academic achievement played a role in their decision to opt out of elective PE. Ava expressed, "This school is really academic" and Lily mentioned, "There is academic pressure for sure." Additionally, Lin spoke in more detail regarding the emphasis placed on academic achievement for her:

The way that I was raised and the way my parents think, they made me focus on academics ... with athletics and arts sort of like they are great to have, but your main focus should be academics, and that is always what I was taught so that really had a part in my decision on if I wanted to take gym.

As Lin suggests, her parents instilled the value of academic achievement in her, which helps to explain, at least, part of the source of the academic pressures presented to and perceived by her (and likely many other students at this affluent private school). Likewise, Rosa reflected on the internalized academic pressure nature:

I think there is [academic pressure] because as you go to higher grades, there is a much bigger demand in terms of academics ... whereas in public schools it is not as hard ... I think one of the biggest reasons I did not want to take PE as a course was more time to focus on academics and my grades, which was really important to me at that stage, and to prepare me for grade 11 when work all matters.

Izabella added to the conversation suggesting that academic pressures stemmed from IB programming and the elective nature of the PE course, which ultimately steered her away from choosing grade 10 PE:

I definitely do think it has an effect on it. Especially if you choose to take the IB route because a lot of things that went through, especially my mind, when I was coming into grade 10 was that I saw gym was an elective.

These perspectives confirm that academic pressures do exist and that they have a negative influence on female students' elective PE enrolment at this private school. The participants believe that there is high value placed on academic achievement, which stems from their perception of the academic pressures upon them.

These results support and extend prior research, which indicated that students from higher SES neighbourhoods experience different academic pressures by parents/guardians to enrol in more academic subject areas in school (Hobin et al., 2010). While this finding relates specifically to the existence of academic pressures at an affluent private school, perhaps the influence of SES and academic achievement on female students' PE enrolment is being mirrored in other similar educational contexts in Canada. Moreover, although others (and we) might recognize that such a focus upon academics at the expense of participation in PE is a common pressure for many female high school students (e.g., see Koca, Hülya Aşçı, & Demirhan, 2005), we also recognize the unique pressures placed upon this school's female students—related, for example, to International Baccalaureate (IB) and “career-oriented” courses. So, although some literature also speaks to the important role that students' purported pursuit of academic excellence has upon PE enrolment, this research has suggested, to us, that it is one of the most important contributors. While we do not offer values of relative salience for our seven identified themes, we do suggest that this (as one of the seven) is especially pronounced for this group of individuals. The caution, then, must be made to those who teach PE within these sorts of contexts: the pronounced and/or perceived value of PE as a necessary component of a holistic education will likely be less than what might be found within public education contexts.

Theme 6: Free time and electives. Participants reported either valuing other courses or free time over the elective grade 10 PE course. Female students who opted out of all elective courses did so in favour of accumulating more free time. This was reflected in Izabella's statement:

In those times, that time could be devoted to gym or band or some other elective, but when I am using my free I am quite grateful for them especially if I have a long night the night before and I have a free in the morning and I can just use that extra 10 minutes of sleep. My decision was just you can either have another subject or you could have a free and I thought it was necessary to have that free.

As was suggested by Izabella, free time is valuable time that could be used for sleep or to get caught up on homework. Rosa also expressed valuing free time over other elective courses:

I think the thing is girls would rather have their freedom to do what they want in that free rather than having to play a sport they might not enjoy ... I think the whole thing everyone was going to take a second science anyway and then the whole thing with having extra frees was a big thing because lots of girls would rather have that free when they can do whatever they like.

As was highlighted by Izabella and Rosa, the freedom to do what they like during their free periods took precedence over other elective courses including the elective grade 10 PE course. We believe part of the reason why the participants believe they need a certain amount of freedom during their day might be due to the fact that they are expected to be involved in so many activities. This was certainly suggested by Lin:

This year I knew I was going to start volunteering plus I could not take PE because of my schedule, and in terms of the second science in university and art which I wanted to keep, but also this year I am coaching and I start volunteering at the local hospital so that takes up even more time.

Although female students have expressed losing interest in PE as a subject area throughout middle school for a variety of reasons (Gibbons & Humbert, 2008), little has been cited in the research about the perception of requiring free time during the school day. Perhaps this finding helps to explain the contextual nature of the educational experience for female students who attend affluent private schools in Canada. That is, it is possible that female students within this affluent private school may actually need more free time than students within public schools. With their “heavy” IB course loads and their incredibly busy extracurricular schedules, it is somewhat understandable to hear them speak about a desire to choose free time over one more (PE) class.

Theme 7: Adequate physical activity accumulation outside of school. All participants felt strongly about this theme as having an influence on their decision to opt out of PE. They believed that the amount of physical activity they were accumulating outside of school was sufficient and that adding more physical activity into their school day was not required. This was attributed to the fact that each of the participants has access to organized physical activities outside of school. Lin clarified this point, “For a lot of girls that I know, they already do sports outside of school that are organized or they go to the gym, which is really great.”

While we agree with Lin that it is great that these participants have access to organized physical activity outside of school, it is important to highlight that participating in one or two sports does not necessarily provide a wide enough range of physical activities for these students to participate in for a lifetime. PE has the capacity to develop a wide variety of movement skills and physical activity-related competencies in multiple environments that can be enjoyed over the course of one’s lifetime.

Rosa thought that time at school should be focused on academics and time outside of school should be focused on athletic pursuits. She explained, “school is more academic and when I go outside of school I have my teams and sports so I would not really think of mixing physical education in the later grades with the academics at this school” (Rosa). She believed that “a lot of girls here do sports outside of school” (Rosa), which is true for those who chose to participate in this study. However, it is important to highlight that there are some female students who do not participate in organized physical activity outside of school and, therefore, must be provided opportunities within PE.

A unique finding from this research was the fact that each of the female students in this study believed that physical activity was important to them. This was highlighted by Emily’s succinct comment, “Activity is really important to me.” Yet, when Ava considered physical activity she concluded, “PE isn’t so important because of the fact that I can do something else outside of school.” These comments, by both Emily and Ava, suggest that physical activity is valued by them, but not necessarily in their PE context. This information tells us that, at a certain point, female students are finding less value in their PE experiences and, as a result, are less likely to enrol in PE when it becomes optional. This research echoes Gibbons and Humbert’s (2008) research, which looked at what female students in middle school PE are looking for within PE. Additionally, each of the female students noted that they did not have a personal need for additional physical activity via the elective PE course since they believe they were accumulating enough outside of school. This finding reaffirms research conducted by Lodewyk and Pybus (2013), which highlighted female students’ lack of a personal need for physical activity as a contributing factor to their decision to opt out of elective PE. Though they may be able to rationalize these decisions in this way, we still believe that accumulating physical activity (ideally while also participating in PE) within the school day—as opposed to remaining almost completely sedentary until after school ends—offers much in the way of health, wellness, and balance.

What is especially unique about this context, and as explained above by both Lin and Rosa, is that these students do not just accumulate physical activity outside of school—they are involved in organized sports programs. In many cases, our observations and discussions with these students have informed us that some of these sports programs are largely inaccessible to many others within the city. For example, tennis, equestrian, swimming, and hockey are all sports played by these female students—and they are all especially expensive. So, while parents/guardians and coaches of students within this school and others like it might do well to pause and consider what is lost when these sporting ventures “replace” PE.

Concluding Comments and Observations

Although we have used a social-ecological framework to present seven themes within three different spheres of influence, it is important to recognize that these influencers do not live in isolation from one another. It is not only influencers within one level that have overlapping and interrelated impacts and results with one another either; influencers across levels do as well. Consider the following two examples. First, intra-level influencers co-ed problems and friend’s influence (mesosystem interactions) shift as female students gain more male friends. That is, once a female student’s friendship group becomes made up of more and more male students, problems associated with co-ed PE will likely change (decrease or increase but change nonetheless). Second, the inter-level influencers perspectives on policy and PE programming (macrosystem relationships) and A+ academic achievement (microsystem affiliations) are similarly relational. The school policies (and culture) are partly to blame for female students’ focus upon academic achievement (at the expense of PE participation). Presumably, if school policies changed and/or the school culture shifted for the better, female students might feel more inclined to focus on a more well-rounded education.

There is much to learn from a case study about female students’ decisions to opt out of elective grade 10 PE at an affluent private school. This study adds to the current knowledge base with respect to female students’ experiences in PE in that it includes information specifically related to influences perceived by female students from high SES families who attend an affluent private school—which provides, in some ways, a point of comparison for other similar educational contexts.

Recommendations for Practice

At the outset of this research endeavour, a social-ecological framework was selected as a theoretical framework to help bring structure to our research question. This social-ecological framework, when adapted to consider PE enrolment among female students at a private school, provided insight into many of the reasons why female students chose not to enrol in the elective grade 10 PE course. Certainly, it provided a useful framework to contemplate answers to our initial research question.

Still, where do we go from here? The factors represented within each of the three levels of influence offer unique possible intervention points to enact recommendations to increase female students’ enrolment in PE. We offer the following suggestions for practice.

First, administrators must be encouraged to offer mandatory PE for all students in their schools. Shifts in policy initiated by administrators away from elective PE toward mandatory PE could help improve the status of PE within their schools. Administrators should also work in

collaboration with PE teachers to support them in providing successful PE courses that are well regarded, especially by female students. This is a suggestion meant to address a clear divergence in practice from regular public school PE. Enabling private schools to effectively grant choice about PE enrolment to students and their parents/guardians has had an obvious negative consequence: instead of 100% participation in PE 10 (as is the case in all other public schools in the province), only one student enrolled in the course. For all that money parents/guardians are paying to this private school, their children are missing out on a quality PE program. Given that students and their parents/guardians cannot recognize this as a problematic occurrence, school leadership must take a role. And, if not them, then perhaps government legislation related to private schools and program planning is in order.

Second, PE teachers might benefit from taking time to listen to their female students' needs regarding a safe learning environment; they should also solicit their suggestions regarding PE programming so as to engage them in meaningful PE experiences. It is important to remember that several small actions by PE teachers can contribute to positive experiences for female students. This could require modifying the design and delivery of their PE program to better suit the needs and interests of their female students. It could also be small, every-day actions that serve to cultivate an encouraging and safe environment for female students. This may include having conversations with both male and female students to promote gender equity and positive interpersonal relationships between male and female students. It could also mean providing a female-only PE option for female students in grade 10 and beyond, as is already provided in earlier years. While this, in many ways, seems to be entirely applicable to all school contexts, note that we are not only suggesting that they do what has already been suggested by others. Though, to be fair, we also are doing this. Evidently, many still do not "get the message" that others have previously shared. So, to that we add our request and our call to action to PE teachers in all schools, including private schools like the one we researched. However, we also recognize that many public schools have taken note of these suggestions. Separate sex classes are commonplace in many schools. Indeed, the nearest public school to this private school offers "girls-only" PE. Private schools, like this one, need to also heed that message and consider these sorts of solutions.

Third, PE teachers can embrace teacher-parent relationships and use these relationships to educate parents/guardians on the benefits of PE and the types of physical activities and experiences being provided to their daughters. As well, physical educators should advocate for female students' involvement in PE whenever they can. We readily admit that this will be an especially difficult task in schools like this. We understand the nature and culture of affluent private schools—where a focus upon academics (especially in IB) and ensuring the best post-graduation opportunities possible are institutionalized ways of being. Despite these obstacles, PE teachers must champion their course and cause. Their task is greater. They will encounter greater resistance, from more individuals. Still, we need them to do this.

Future Inquiry Possibilities

This research has added to our curiosity and, as a result, more questions have come to light. It would be valuable to compare the findings of this research with other schools (particularly within similar contexts) to see if there are similar or different factors that contribute to low levels of female enrolment in elective PE courses. We are interested to know more about the effect of SES on academic pressure and female students' PE enrolment. We also wonder if male students in similar and different educational contexts experience similar academic pressures to the ones

participants in this study reported.

As well, further research relating to SES and organized and unorganized physical activity participation among female students is warranted. A more in-depth understanding of this relationship could shed light into possible intervention strategies for female students of various SES—which could help teachers develop strategies that target students that are at risk of being sedentary. This information might also aid teachers in the promotion of physical activity and PE among students from families of various SES.

Because parents/guardians supported their daughters' decisions to opt out of PE at this school, we are curious to know more about parents'/guardians' perceptions of PE. Considering the points of view of parents/guardians within this case study school (and/or others like it) may provide insight into an intervention that is geared toward improving their perceptions and increasing their support for their daughters' involvement in PE.

Finally, it is our hope that this research will encourage other teachers to listen to the experiences of their female students (and to, perhaps, document it in the research literature) so that more teachers can have access to the tools they need to provide more positive PE experiences. We certainly believe that providing such positive experiences in PE could lead female students to choose to opt in when PE becomes optional.

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