



# PHENex Journal/Revue phénEPS

## **A Student's Choice: Enrollment in Elective Physical Education**

*Inscription aux cours d'éducation physique optionnels: Au choix de l'élève*

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*School-based physical education (PE) is a critical setting for the promotion of physical activity and health among adolescents. However, enrollment in PE significantly decreases when PE becomes an optional subject. The purpose of this study was to identify factors influencing enrollment intention in elective PE among female and male students. McLeroy's (1988) ecological model of health promotion provided the framework to examine the barriers to and facilitators of students' enrollment in elective PE. Focus group interviews with grade 10 students (N = 63) were used to collect data. In keeping with the ecological model, themes that influenced enrollment were categorized as individual or social environmental. Individual themes included past experiences, self-efficacy, class schedule, and knowledge of the course. Social environmental themes included the influence of significant others, course curriculum, and community activity opportunities. By understanding what influences students' enrollment, actions can be better targeted to limit the barriers and facilitate enrollment.*

*Le milieu scolaire constitue le contexte idéal pour promouvoir l'activité physique et la santé auprès des adolescents au moyen des cours d'éducation physique. Par contre, le taux de participation aux cours d'éducation physique chute radicalement quand la matière devient optionnelle. Cette étude explore les facteurs qui influent sur le taux de participation des filles et des garçons aux cours d'éducation physique optionnels. Les auteures ont eu recours au cadre du modèle écologique de promotion de la santé de McLeroy (1988) pour examiner*

*ce qui peut décourager ou encourager les élèves à s'inscrire aux cours d'éducation physique. Des entrevues ont été menées auprès de 63 élèves de la 10<sup>e</sup> année pour recueillir des données. Conformément au modèle écologique, les thèmes environnementaux ayant une incidence sur l'inscription ont été classés comme étant individuels ou sociaux. Les thématiques à caractère individuel avaient trait aux expériences passées, à l'auto-efficacité, à l'horaire des cours et à la familiarité avec le cours. Les thématiques à caractère social tenaient compte des pressions exercées par les proches influents, du programme du cours et des choix d'activités communautaires possibles. Une fois qu'on a réussi à établir ce qui influe sur le taux de participation des élèves, il est plus facile de cibler les mesures requises pour abattre les obstacles et favoriser la participation.*

### **Introduction**

The overall aim of school physical education (PE) programs is to promote lifelong physical activity (PA) and to provide students with an opportunity to develop the attitudes, skills, and knowledge needed to lead active healthy lifestyles (Gibbons & Gaul, 2004). Unfortunately, although PE can positively impact activity levels of adolescents, participation in Canadian PE classes declines tremendously when PE becomes an option. For example, in Ontario when PE becomes an option in grade 10, student enrollment was 49%, which was a drastic decrease from the 98% enrollment in grade 9 (Dwyer, Allison, Goldenberg, Fein, Yoshida, & Boutillier, 2006). In British Columbia, when PE becomes an elective in grade 11, only 10% of female and 22% of male students choose to enroll (Gibbons, Wharf Higgins, Gaul, & Van Gyn, 1999). If students do not elect to enroll in PE, they will not receive the benefits (i.e., knowledge needed to lead an active healthy lifestyle) school-based PE programs can provide. Therefore, the purpose of this study was to examine the factors influencing a student's intention to enroll in elective PE.

In order to understand an individual's intention to choose a behavior, such as enrolling in elective PE, it is necessary to understand the correlates of a behavior (Nahas, Goldfine, & Collins, 2003). Correlates refer to those factors that are associated with behavior (Bauman, Sallis, Dzewaltowski, & Owen, 2002). Factors that are perceived as discouraging a behavior are characterized as barriers. Factors that are perceived to promote a behavior are termed facilitators (Nahas et al., 2003).

### **Conceptual Framework**

This study was grounded in McLeroy's (1988) ecological model for health promotion (McLeroy, Bibeau, Steckler, & Glanz, 1988). The model suggests that influences on health behavior emanate from the interaction between the individual and elements of one's social and physical environments (McLeroy et al., 1988; Sallis & Owen, 2002). For example, an individual's behavior, such as choosing to enroll in elective PE, is not solely influenced by that person's thoughts, feelings, and actions. Her or his behavior can also be influenced by significant others and environmental factors. The purpose of an ecological model is to focus attention on the individual and social environmental causes of behavior (McLeroy et al., 1988).

According to this model, behavior is influenced by five factors: intrapersonal, interpersonal, institutional, community, and public policy.

Intrapersonal factors reflect characteristics of the individual, such as an individual's level of confidence. Interpersonal factors refer to social networks and support systems, such as support from family and friends. Institutional factors occur within social institutions, such as a school's PE course curriculum. Community factors occur between organizations, institutions, and informal networks within defined boundaries, such as PA opportunities within one's community (McLeroy et al., 1988). In this study, public policy factors, defined as local, state, and national policies that may prevent PA were not assessed due to findings from previous research with adolescent populations, which indicated that adolescents did not report any public policy factors (Gyurcsik, Spink, Bray, Chad, & Kwan, 2006).

By using the ecological model, perceived barriers and facilitators to enrollment in elective PE that ranges from individual (i.e., intrapersonal) to social environmental (i.e., interpersonal, institutional, and community) may be identified. For example, barriers may reflect perceived individual factors, such as lack of motivation (i.e., intrapersonal) or may represent perceived social environmental factors, such as lack of support from family and friends (i.e., interpersonal) (Allison, Dwyer, & Makin, 1999). The necessity of identifying a wide range of factors lies in the fact that individual factors require a different intervention approach compared to social environmental factors (McLeroy et al., 1988). For example, an intervention designed to eliminate the individual barrier of low self-confidence to participate in PE would differ from an intervention designed to alleviate the social environmental barrier of a lack of parental support to enroll in elective PE.

### **Literature Review**

The exploration of the factors involved in the decision to enroll in elective PE is an under-investigated area of research. The majority of research has focused on students' attitudes towards and experiences in elective PE programs. Luke and Sinclair (1991) examined the potential determinants of adolescent attitudes toward PE among students who were both enrolled and not enrolled in elective PE. They found the factors influencing one's enrollment in elective PE were similar to the reasons students were dissatisfied with school PE programs. The curriculum was the top-rated factor impacting attitudes towards PE, regardless of gender or intention, and a factor for both positive and negative attitudes towards PE (Luke & Sinclair, 1991).

Several researchers found that females were particularly dissatisfied with their PE experiences throughout childhood and adolescence (Gibbons et al., 1999; Humbert, 1995). For example, Gibbons et al. (1999) used focus group interviews to gain insight on factors that may discourage or encourage enrollment in elective PE among female students in grades 10 and 11. Interviews with female students revealed dissatisfaction with the content of the PE curriculum, specifically the perceived overemphasis on team sports. Gibbons and Humbert (2008) and Olafson (2002) found that middle school females were also experiencing frustration with PE. Similar to high school females, their frustration stemmed from dissatisfaction with the course content and learning environment. These results suggest that students' attitudes towards PE are developed well before their final high school years, and these attitudes may be guiding their choice to continue in PE.

Although literature indicates that if students are dissatisfied with their PE experiences they are less likely to choose to continue when given a choice, there is considerable evidence that shows if the needs of students are met their involvement in PE may continue. Fraser-Thomas and Beaudoin (2004) and Gibbons and Gaul (2004) explored the experiences of females in PE courses that were specifically designed to meet their needs. Results of these studies provide support that if females' needs are met within PE classes they are more likely to want to participate in PE when it becomes their choice. This highlights the importance of identifying factors facilitating students' enrollment.

In the PE domain, despite its potential, the ecological model has not been used to examine individual and social environmental barriers and facilitators to enrollment in elective PE. However, several studies have employed the ecological model to explore barriers and facilitators to PA behavior among youth (Gyurcsik et al., 2006; Gibbons & Humbert, 2008; Humbert et al., 2006; Robertson-Wilson, Levesque, & Richard, 2007). For example, Gyurcsik and colleagues (2006) used an ecological framework to identify barriers to PA among students in grades 7 through the first-year of university. They found that barriers for grade 11 students included a lack of motivation and skill, friends not physically active, intimidation by others in the social environment, facility-related barriers, and other competing interests. This emphasizes the importance of using an ecological model to understand both individual and social environmental factors to PA behaviors.

Three major limitations exist within the previous research on enrollment in elective PE and were addressed in the present study. First, the majority of factors identified by participants were individual factors that inhibited enrollment (i.e., barriers), such as a lack of fun and enjoyment in current PE programs and negative experiences in previous PE programs. Limited social environmental barriers have been identified in the literature. Second, factors which encourage enrollment (i.e., facilitators) were not distinctly targeted. In order to fully understand the decision-making process of enrollment in elective PE, all factors that influence students' decisions to enroll are of equal importance. Third, a conceptual framework to understand the multiple levels of factors that are associated with student enrollment was absent in previous studies. By using the ecological model (McLeroy et al., 1988) both individual and social environmental factors can be identified.

In addition to expanding the research on barriers and facilitators to enrollment in elective PE, this study addressed one additional shortcoming in the literature – the lack of research among male students. Since females are consistently less involved in PA than males at all ages, there is justifiably more attention in the literature devoted to females (Allison, Dwyer, Goldenberg, Fein, Yoshida, & Boutilier, 2005). Nevertheless, participation in PA among the male population also decreases with increasing age and perceived factors associated with participation in PA are likely to differ between genders (Allison et al., 2005). As such, examination of factors to enrollment in elective PE must be examined in both genders. Doing so will lend insight into whether females and males experience the same and/or different salient perceived barriers and facilitators to enrollment in elective PE. This information can eventually assist in targeting gender-specific factors, if needed, which influence enrollment in elective PE. The identification of factors associated with students' decision to

enroll or not enroll in PE could provide useful information in order to improve the appeal of curricular content and perhaps increase enrollment in elective PE (Luke & Sinclair, 1991).

## Method

### *Participants*

Sixty-three grade 10 female (n = 24) and male (n = 39) students within mandatory PE classes in three high schools located in a midsized Western Canadian city volunteered to participate in this study. The participants represented diverse levels of experience and achievement in PE and diverse levels of participation in PA within the school and/or community. In the participating school division, grade 10 PE is compulsory and taught in gender-segregated classes. PE becomes an optional subject in the 11<sup>th</sup> grade and becomes co-educational. Students selected their classes for grade 11 in the second semester of grade 10 through a course selection guide. Each school provided a description of the grade 11 PE course within the school's course selection guide. Students use the course selection guide to view course descriptions in order to assist in their class selections. Based on these descriptions, the grade 11 PE course offered at each of the participating schools was similar.

### *Data Collection*

Semi-structured focus group interviews were used to explore factors to enrollment in elective PE among the participants. For adolescent participants, the focus group format is more enjoyable than one-on-one interviews and decreases the fear and anxiety regarding the interview process (Thomas, Nelson, & Silverman, 2005). In order to achieve the most accurate responses, the focus group discussions were conducted as close to the completion of the course selection guide as possible. With the permission of the teacher, interviews were conducted during PE class time and lasted approximately 1 hour.

A total of 12 focus group interviews were conducted. Selected participants were organized into homogeneous focus groups based on school, gender, and intention to enroll in elective PE in order to create an environment which maximized the comfort of participants and promoted as much conversation as possible. Focus group size ranged between 4-6 participants. Intention to enroll was identified through a question, which asked students to identify their intention to enroll in grade 11 elective PE by checking either 'yes', 'maybe', or 'no'. The students who selected 'maybe' were not eligible to participate in the study.

The interview guide was developed around the ecological model in order to uncover different levels of factors (see Table 1). Participants not intending to enroll in grade 11 PE (n = 21) were asked questions regarding perceived barriers, which may have prevented their intention to enroll. Participants intending to enroll in grade 11 PE (n = 42) were asked questions regarding perceived facilitators, which may have promoted their intention to enroll. Interview guides were piloted prior to data collection with grade 10 students not participating in the study. No revisions were made to the interview questions following the completion of the piloted focus group interviews. However, the piloting of the interview guide assisted in the development of prompts following the semi-structured focus group questions.

Table 1  
*Focus Group Questions Based on Ecological Model*

Ecological Level	Questions for Students Not Intending to Enroll	Questions for Students Intending to Enroll
Intrapersonal	Is there anything about you that influenced your decision not to enroll in grade 11 PE?	Is there anything about you that influenced your decision to enroll in grade 11 PE?
Interpersonal	Did anyone do or say anything that stopped you from choosing to enroll in grade 11 PE?	Did anyone do or say anything that helped you in your decision to enroll in grade 11 PE?
Institutional	Is there anything about your school that stopped you from choosing to enroll in grade 11 PE?	Is there anything about your school that helped you in your decision to enroll in grade 11 PE?
Community	Is there anything about your community (the area around your home and school) that stopped you from choosing to enroll in grade 11 PE?	Is there anything about your community (the area around your home and school) that helped you in your decision to enroll in grade 11 PE?

### *Data Analysis*

After the focus group interviews were audio-taped and transcribed verbatim, the transcripts were returned to the participants for verification. Following the completion of transcription, the ecological model was used to categorize the different levels of factors discussed by the participants. The first step in categorizing the factors was to code the data into one of the four ecological categories (i.e., intrapersonal, interpersonal, institutional, community). The barriers were categorized into one of the four ecological categories and the facilitators were categorized into one of the four ecological categories, resulting in eight different themes.

Once the data were organized by barrier or facilitator and ecological category, the data were further categorized. Within the eight previously developed categories, new themes were formed to create higher level of analysis (Morse & Richards, 2002). For example, within the category ‘intrapersonal barriers’, further categories developed such as past experiences and self-efficacy. Two independent researchers read the transcripts and viewed the categories in order to confirm analysis and categorization of the factors. Discrepancies were discussed until a classification agreement was reached.

### **Results**

The purpose of this study was to provide insight into the factors involved in the intention to enroll in elective PE among adolescents. The ecological model (McLeroy et al., 1988) was used to structure focus group questions in order to uncover multiple levels of factors. The findings support the use of an ecological approach in the identification of both individual and social environmental barriers and facilitators to enrollment intention. The themes that emerged from the focus

group interviews are organized using the four ecological categories. The themes provide insight into the factors that influence student enrollment in elective PE.

### *Intrapersonal*

In the intrapersonal category, four themes emerged from the focus group interviews: past experiences, self-efficacy, personal choice of class scheduling, and knowledge of the PE course. Gender differences were present among some themes.

#### *Theme 1: Past Experiences*

Female participants, not intending to enroll in elective PE, described their negative experiences in their previous PE classes. They frequently expressed dissatisfaction about the repetitiveness of the course content. For example one student stated:

In grades 6, 7, and 8 we did all the same things just over and over again. Every year we did volleyball, basketball and the same sports...I think we repeat everything too much and we don't learn any new skills so our level is the same...I don't like the repetition.

In addition, several female participants felt their teachers favored students who were more athletic and successful in PE. The favored students in most cases were their male classmates. Past co-educational PE appeared to be a negative experience for several females. Female participants commented that they preferred gender-segregated classes as their male classmates often dominated activities. This seems to have created a competitive environment where females could not be themselves.

The majority of female and male students intending to take PE had positive past PE experiences, previously succeeded in PE courses, and were enrolling because their past experiences in PE courses were positive. This was apparent in the following comment: "I find that gym comes easy to me. Like some people struggle with it and find it challenging. I find it easy and its fun."

#### *Theme 2: Self-Efficacy*

Self-efficacy influenced enrollment intention among female participants. The females revealed their lack of self-efficacy and their abilities to do physical activities, especially within PE settings, inhibited their enrollment intention. Their low self-efficacy caused reluctance to be active in front of others and increased their desire to be active alone. Specifically, a number of females disliked participating in the activities in PE in front of their classmates. This was shown in one participant's comment, "I prefer to do PA by myself or with a friend. Like going swimming or I would rather run on a machine than actually run on the ground where people don't watch you."

In contrast, several females intending to enroll were more efficacious and not concerned with other students' perception of their abilities. They were more interested in having fun in the activities within the course. One participant described her confidence in trying new activities:

If there is a sport I am not good at or never tried, I don't really care I just go out and have fun. I don't really care what people think of me as long as I am having fun doing it.

The male students in the study did not report self-efficacy as an influential factor in their enrollment intention.

*Theme 3: Personal Choice of Class Schedule*

Finding room for PE in their class schedule was frequently mentioned throughout the interviews. Scheduling conflicts were attributed to preferences for other elective classes and required courses needed for graduation and post secondary education. When given a choice, PE was not at the forefront of elective courses among the students not intending to enroll. When asked if they would enroll if PE fit in their class schedule, most of the students would still not enroll and would prefer to take a spare (a free period within a student's timetable – no scheduled class).

It became evident that students not intending to enroll did not consider PE to be useful to their future. Higher priorities were the 'academic' classes necessary for their post-secondary education. One student expressed their inclination for other courses, "I just think I have preferences for other things other than gym...well like mechanics and cars are a big part of my life and I value that more."

In contrast, several females intending to enroll in PE stated they were able to fit the courses needed for their post-secondary education plans, the elective classes they wanted to take, and PE into their course schedule. Females intending to enroll commented that PE was one of their top elective choices. Male participants did not discuss their class schedule as an influential to their enrollment intention.

*Theme 4: Knowledge of the PE Course*

Several of the male participants discussed their lack of knowledge regarding the grade 11 PE program as a barrier to their enrollment. The male students were unaware and uninformed about the grade 11 PE course. When asked to describe the course, the majority of male participants had little knowledge about the course and its contents. They explained that their PE teacher did not talk to them about the course and if they had more information they would have considered enrolling. This was shown in one student's comment, "I don't really know what it (grade 11 PE) is." Female students did not indicate that their knowledge of the PE course was influencing their intention to enroll.

*Interpersonal*

Several interpersonal factors were discussed as influencing participants' enrollment intention. These factors had one overarching theme: influence of significant others. Within this theme, gender differences were present.

*Theme 1: Influence of Significant Others*

Parental influence was a prominent interpersonal factor among the students. Parents of students not intending to enroll discouraged their enrollment in PE, and encouraged more 'useful' academically-focused classes important to their future and required for post-secondary education. One student explained that "My parents care more about school and education than phys. ed."

Several male students stated their parents believed the purpose of PE was to be physically active. Since they were physically active outside of school, their



parents felt they did not need to enroll in PE. One student explained, “My parents said that I don’t have to take phys. ed. as long as I stay active out of school.”

In contrast, the students intending to enroll in PE consistently communicated the positive influence of their parents on their enrollment. Their parents valued PA and believed that PE was an important course, “I told my dad I wanted to take it and he said he thinks that’s a good decision because he is really into PA and he thinks it’s important.”

A unique interpersonal facilitator among male adolescents was the influence of their PE teachers. Their PE teachers took time out of their grade 10 PE course to discuss the grade 11 PE course with them. This provided the males with knowledge of the course, its structure, and its contents. This information facilitated their enrollment intention. One participant described the influence of his PE teacher, “My teacher took that one day out to tell us about how much we would enjoy PE.” Interestingly, many male participants who were not intending to enroll commented that their lack of knowledge regarding the PE course as a barrier to enrollment. This highlights the importance of PE teachers discussing the course with their students to provide an understanding of the course and its contents.

The influence of peers was a critical interpersonal barrier to enrollment intention among female students. Several females explained that their close friends were not enrolling, which negatively impacted their intention. The majority of the females stated that if their close friends were enrolling in PE they would also consider enrolling. For example, one student commented, “My friends aren’t enrolling...if all my friends were enrolling for sure I would consider it more.”

In addition, the type of students intending to enroll in grade 11 PE was a barrier to females’ enrollment. They felt self-conscious participating in activity in front of the ‘types’ of students intending to enroll, as they did not perceive themselves as highly skilled in the activities within the PE course. Many female students wanted to avoid being judged by other students with high physical ability and did not want to be in the same PA setting as them. Such students were described as athletic, naturally skinny, fit, overachievers, and people who succeeded at everything, especially sports. One participant resentfully described these people with the following statement, “People that can run for 12 minutes and they just keep running for longer, and try as hard as they can, people who are always winning sports.”

Further, the females preferred being segregated from their male classmates in PE classes. Male students were anticipated to dominate the class, increase the competition, and make the class less enjoyable. A student offers the following explanation of the presence of male classmates, “It’s basically like guys are trying to beat you in every single way like when you are running or playing softball or who can run the longest or who can get most people down and it’s just not fun.”

### *Institutional*

The institutional factors reported by participants revealed several specific differences between gender and participants’ intention. The theme that emerged among the institutional factors reported by the students was the grade 11 PE course curriculum.

*Theme 1: Course Curriculum*

Perceptions of the grade 11 PE curriculum both inhibited and promoted participants' enrollment intention. Different reasons for the dislike of the curriculum emerged. Many female participants described themselves as non-competitive, associated competition with PE classes, and preferred a non-competitive PE environment. Further, several female participants found little value and use for the grade 11 PE curriculum, did not know where they would use the information gained from the course, and felt the course was only useful to provide them an opportunity to play sports. Several females specifically discussed two activities within the curriculum that inhibited their enrollment intention: team sports and running. This was evident in the following example:

When I think phys. ed. the thing that comes to mind is running 'cause all I have done is basically running. I don't enjoy running so I don't enjoy gym.

I don't really like sports - that's why I am not joining.

Participants intending to enroll enjoyed the course curriculum and found the course valuable and useful to their future. They believed the course was important as it provided experience in activities they may participate in as adults. They also looked forward to the new activities they have never tried before. One student commented, "I think it will definitely help you later on... you will have the experience of doing those things and you might want to go back and do them."

*Community*

The community was defined to the participants as the 'area around their home and their school'. Although students discussed that their community influenced their intention to enroll in elective PE, it became apparent through the focus group interviews that the community was less influential on enrollment intention than other previously reported ecological factors.

*Theme 1: Activity Opportunities within their Community*

Having access to community facilities was a barrier to many females not intending to enroll in PE. Such facilities allowed the female students choice over the types of activities they participated in, the time of day to be active, and the people to be active with, which provided a sense of choice and control. Being active in the community, instead of in PE class, would address the intrapersonal barrier of being self-conscious participating in front of others, the interpersonal barrier of being active in front of certain 'types' of students, and the institutional barrier of participating in activities they did not enjoy. This was explained by one student in the following comment, "It's better to do it on your own time you actually want to be active instead of having a set time in the day where you probably wouldn't want to be active."

In contrast, several students stated their community facilitated their enrollment intention. The PE course provided other types of activities they did not or could not participate in within their community. For example, many of the participants were involved in community sports; however, the PE curriculum gives them an opportunity to try activities not offered in their community (i.e., scuba diving). This is shown in the following excerpt:

PE gives you an opportunity to do other sports that you haven't done before, I played on two community basketball teams but in PE you would be doing other sports that you haven't had a chance to ever try before.

### **Discussion**

Using a qualitative ecological framework, the present study identified a wide range of factors influencing enrollment intention in elective PE. The discussion of the barriers and facilitators are presented by ecological category. Although the ecological categories overlapped somewhat, each category is presented separately to fully explicate the findings and describe the factors within each ecological category.

#### *Intrapersonal Factors*

Consistent with previous literature, the intrapersonal factor of "Past PE Experiences" was a predominant theme that created positive or negative attitudes towards PE. It has been shown that female students who previously experienced negative encounters with PE opt out when given a choice (Gibbons et al., 1999). This attitude toward PE has developed well before students' final years of school (Gibbons & Humbert, 2008; Humbert, 1995).

Among females not intending to enroll in the present study past experiences in co-educational PE created a negative competitive environment which was described as 'being no fun.' Ennis (1999) and Satina, Solmon, Cothran, Loftus, and Stockin-Davidson (1998) affirmed that male dominance in PA contributed to females' lack of participation in PE. In addition, based on their previous experiences, the female participants perceived PE to be largely composed of team sports, which resulted in negative attitudes towards PE. Conversely, past PE experiences was an intrapersonal facilitator among several female and male students intending to enroll. Where their past experiences were positive, students described their enjoyment of PA and previous PE classes, specifically the enjoyment of competition and team sports. Most literature examining factors that influence PA and PE participation has found these particular intrapersonal factors to be reported by male adolescents (Couturier, Chepko, & Coughlin, 2007; Tergerson & King, 2002). For example, Couturier et al. (2007) found that male adolescents enjoy PA and have a more positive attitude towards PE than females. Specifically, they found that more males than females prefer team sports and competitive environments.

"Self-efficacy" was a unique intrapersonal factor among female students. Self-efficacy focuses on the extent to which an individual has confidence in one's skills and abilities in performing a desired behavior (Bandura, 1997). Bandura suggests that self-efficacy in physical abilities is directly related to participation. Singer, Hausenblas, and Janelle (2001) suggest that as self-efficacy is closely related to motivational factors such as choosing to participate in PA, this may be transferred to elective PE as adolescents are given a choice whether or not to enroll. When making the decision whether to enroll in elective PE, many female students expressed that their confidence in their skills and physical abilities influenced their enrollment intention. Perceptions of confidence and skill appeared to be an essential factor for the female students to enroll in PE. If the females had low self-efficacy in their physical abilities, they tended not to enroll in PE when given a choice.

The theme “Personal Choice of Class Scheduling” highlights the complexity of one’s enrollment intention. When students were deciding which courses to select for their class schedule, their decision was based on two factors: required courses and elective courses. Class schedules have unavoidable limitations, such as required courses and spaces available for elective choices, nonetheless, it must be noted that accessibility of PE in the course schedule was also a facilitator to enrollment among the female participants. Furthermore, if participants had room in their schedule to take PE some would prefer to take a spare or other elective classes. Perhaps enrollment intention was related more to the lack of desire to enroll in PE than the lack of accessibility in one’s class schedule. As well, it must be noted that Gibbons et al. (1999) found accessibility of PE in the timetable was inhibiting students’ enrollment. The participants indicated that they could not enroll because PE conflicted with a required course. This emphasizes the importance of ensuring that PE courses are accessible within students’ timetables.

“Knowledge of the PE Course” was a distinguishable barrier among male adolescents. McLeroy et al. (1988) indicated that individual characteristics such as knowledge might be an important source of influence on the health-related behaviors of individuals. Previous research on enrollment in elective PE programs among males is limited. However, previous research has found that providing females with information about the course prior to selection played a vital role in influencing their enrollment choice. Gibbons and colleagues (1999) discussed the elements of an ideal PE program with young women. Many of the elements that the girls described were already included in their school’s elective PE program; however they were unaware and uninformed of the elective PE course and its contents (Gibbons et al., 1999). This suggests educators need to provide students with information prior to their selection of courses.

### *Interpersonal Factors*

Participants reported several interpersonal factors with the overarching theme of “Significant Others.” Literature consistently confirms that social influences shape adolescent PA patterns (Keresztes, Piko, Pluhar, & Page, 2008; Neumark-Sztainer, Story, Hannan, Tharp, & Rex, 2003). For example, Thompson, Rehman, and Humbert (2005) found social factors, including parents and peers, either impede or promote youth’s engagement in PA. Although research has not been focused specifically on social influences to enrollment in elective PE, the influence of significant others affects engagement in PA among adolescents (Gibbons & Humbert, 2008; Keresztes, et al., 2008; Neumark-Sztainer et al., 2003).

Trost et al. (2003) found adolescents whose parents are supportive of PA are more likely to participate in PA than adolescents whose parents are not supportive. In the present study, parental support or lack of support towards enrollment was determined by the value that the students’ parents placed on PE programs. The low value that some parents seemed to hold for PE in the study may suggest that educators should strive to ensure that parents understand the value of PE programs, especially the positive effects of daily PA on academic achievement (Keays & Allison, 1995). Neumark-Sztainer et al. (2003) suggest that interventions aimed at increasing PA among adolescents may be enhanced by improving support from significant others, including parental support. Thus,

based on the results of this study and previous findings, parents are an important influencing factor on enrollment intention of adolescents.

The influence of friends has been recognized in the literature as one of the most common factors for the prediction of PA participation and motivation to be active among adolescents (Humbert et al., 2006; Humbert et al., 2008). However, friends were only reported as an influential factor to enrollment intention among females not intending to enroll. This may be explained with two possible reasons. First, Anderssen and Wold (1992) reported a stronger association for females compared to males between the involvement in PA and the influence of friends. Second, other barriers to female enrollment intention were connected to the interpersonal barrier of friends. These barriers included the desire to participate in PA in the absence of others or with close friends, the dislike of students who intended to enroll in elective PE, and the intrapersonal barrier of low self-efficacy in PA. The females felt self-conscious participating in PA in front of others and wanted to avoid being judged by their classmates. Ridgers, Fazey, and Fairclough (2007) found that for females the fear of being negatively evaluated was associated with low PA participation. Olfason (2002) found that females preferred to be physically active in front of people in the same friendship group as this relieved the discomfort and self-consciousness they felt in PA environments. The role of friends is an influential factor in relation to enrollment in PE among females and may need to be targeted in order to increase participation in elective PE among female students.

Teachers can play an influential role in students' activity behaviors. However, male participants were the only group that mentioned teachers as an influential factor in their enrollment choice. Their PE teacher provided them with information regarding the course. Consequently, these male students had the best understanding of the grade 11 PE program of all participants interviewed. This was further emphasized by the male students who were not intending to enroll. Several of these students indicated that their lack of knowledge on the PE course was a barrier to their enrollment. This highlights the importance of PE teachers' promoting enrollment and providing information on PE elective courses to their students.

### *Institutional Factors*

The influence of the course curriculum was based on two factors: students' value towards the grade 11 PE class and the activities within the course. Previous research reports that PE is not seen as a subject of priority among adolescents (Couturier et al., 2007). Further, Luke and Sinclair (1991) identified the PE curriculum content as a top-rated factor for both positive and negative attitudes towards PE regardless of gender or intention.

Numerous studies have explored females' attitudes toward PE curriculum content. Fraser-Thomas and Beaudoin (2004) found 'activity type' was a primary factor contributing to females' enjoyment of PE class. Specifically, they found that females preferred non-competitive individual recreational activities instead of team sports. The dislike of competitive team sports may be related to females' lack of efficacy in team sport activities. Ridgers et al. (2007) suggests adolescent females have a low perception of their athletic ability. Several studies support females' desire to participate in PE in a fun and non-competitive environment (Brown, 2000; Gibbons & Humbert, 2008). Van Daalen (2005) stated that one of

the key factors associated with females' decision to drop PE was the compulsory competition and suggests PE should shift the focus away from competition and toward health outcomes. In the present study, as females viewed the curriculum to be primarily composed of competitive team sports, the curriculum was a barrier to their enrollment intention. Researchers suggest that PE content for females should include a more diverse choice of physical activities beyond the team sport focus (Brown, 2000; Gibbons & Gaul, 2004). However, many students intending to enroll enjoyed the activities within the elective PE course. Therefore, PE programs are meeting the needs of some students and failing to meet the needs of others, causing a challenge to develop courses that meet the needs of all students.

### *Community Factors*

No research has examined community factors to enrollment in elective PE. However, Sallis, Prochaska, and Taylor (2000) suggest that increases in levels of PA among adolescents can be accomplished by increasing the number of activity opportunities within one's community. Community factors were not reported as frequently as other ecological factors and were less influential on enrollment intention.

### **Conclusions**

The results of this study provide information on the factors that influence student enrollment in elective PE courses. However, there are still many areas that need to be addressed in order to gain a better understanding of enrollment in senior PE courses. This study provided preliminary findings on the factors that facilitated students' enrollment. Within the literature, facilitators to enrollment in elective PE programs are an under-investigated area of research.

Further, a more in-depth understanding of the reported factors within each ecological category is needed. For example, within the intrapersonal ecological category the students repeatedly stated that their efficacy in PE was either promoting or inhibiting their enrollment intention. Self-efficacy theory suggests four primary sources of self-efficacy: past performance, vicarious experiences, social persuasion, and physiological/affective states (Bandura, 1997). Many of these sources were shown within this study as influencing factors to enrollment intention. Therefore, the influence of self-efficacy on enrollment in elective PE programs needs to be further explored.

PE is not viewed as an important class among students not intending to enroll as well as their parents. The benefits of PE programs need to be better communicated to both students and parents. Educators should strive to ensure that all of their students understand that leading a healthy active lifestyle can benefit their health and PE programs can assist in developing an active lifestyle. In addition, parents may need to be targeted and their knowledge of the importance of PE programs may need to be enhanced.

From the findings of this study, it became clear that current PE programs are meeting the needs of some students while not meeting the needs of other students. The challenge is to develop and teach PE courses that meet the needs of all students. This highlights the need for professional development assistance for teachers who are making changes in senior PE programs. More research is

needed to understand the complexity of developing programs that all students find meaningful and motivating.

In addition, students who are undecided whether they are enrolling in elective PE at the time that the course selection guide is discussed may be worth investigation. Although, the students who selected 'maybe' to the question 'are you intending to enroll in elective PE' were excluded from this study's population, these students may be able to help researchers identify the critical factors that influence students' decision. Further, public policy factors were not targeted in this study; however, policy was underlying several of the findings. For example, several female students discussed the preference for a variety of physical activities within their PE classes. Provincial curriculum guides explicitly support and encourage the use of a range of activities to fulfill the prescribed learning outcomes. Moreover, a public policy factor that could support the issue of enrollment in elective PE programs is mandatory PE. For example, Manitoba implemented mandatory PE from kindergarten to grade 12 (Manitoba Education, Citizenship & Youth, 2007).

The findings of the current study offer physical educators information that can assist in the promotion of elective PE programs. It is clear that one of the strengths of this study was the exploration of different levels of ecological factors. The ecological model (McLeroy et al., 1988) provided this research with a systematic approach to the identification and classification of the reported barriers and facilitators and helped uncover both individual and social environmental factors influencing enrollment intention. Numerous factors within each ecological category were identified as influencing enrollment intention in elective PE courses among the participants. If the enrollment in elective PE is going to be increased, PE programs must continue to target the individual and social environmental factors that influence student enrollment in PE.

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