

Whose Gym Is It? Gendered Perspectives on Middle and Secondary School Physical Education

Lynn E. Couturier, Stevie Chepko and Mary Ann Coughlin

Abstract

This study is the result of an action research project between a large, urban public school system and the faculty in a physical education teacher preparation (PETP) program in the same city. This collaboration led to the creation of a survey, administered to over 5000 students, to collect data about attitudes toward physical education. The data were analyzed for gender differences, and while boys and girls responded similarly on many items, there were some significant differences based on gender. Boys and girls differed on activity preferences as well as responses to environmental and social obstacles. Girls were more interested in cooperative activities, fitness, and dance than boys. Girls also cited logistical issues, such as discomfort with showering and changing, as barriers to participation at higher rates than boys. Physical educators need to consider the differing needs of girls and boys when planning and implementing the curriculum if they are to be successful in attracting and retaining the interest and participation of all their students.

This study is the result of an action research project between a large, urban public school system and the faculty in a physical education teacher preparation (PETP) program in the same city. In this action research project, the public school teachers collaborated with the PETP faculty to develop and implement a new curriculum. The new curriculum was activity based at the middle school level. Middle school students participated in a wide variety of activities with no activity being repeated during their middle school

experience. Both non-traditional and traditional activities were included, but the majority of activities were team and individual sports or fitness related. The secondary curriculum allowed students to select from a list of traditional and non-traditional activities with one required wellness or fitness selection to be taken each year. Secondary students could not select the same activity at the same level during their four years in the physical education program. Intermediate levels in basketball and volleyball were offered as part of the secondary curriculum. These two teams sports were the only activity offered at the intermediate levels. The new curriculum had been in place for three years when the study was conducted.

Once in place, the PETP faculty continued to work with the public school teachers on curriculum and assessment. During this follow-up period, the public school teachers became interested in learning more about their students' perspectives on the curriculum and what factors influenced their students' engagement (or not) in classes. Teachers were interested in why student participation levels dropped during the middle and high school years in physical education for both males and females. Specific concern was expressed about the greater number of female students choosing not to participate. Teachers at both levels believed the factors contributing to student non-participation were largely environmental and out of their control. Environmental issues included outdated locker rooms, "gang" showers, lack of storage for clothing, and limited time between classes. Working together, the teachers and the PETP faculty designed a study to

examine these factors and their potential influence on participation. Due to the volume of data collected, the study was divided into two parts. The first part, which examined differences by level (middle school versus secondary school), was reported in *The Physical Educator* (Couturier, Chepko & Coughlin, 2005). This portion of the study focuses on gender.

Researchers have found that adolescent girls are less active than males and that activity levels decrease with age (Allison, Dwyer & Makin, 1999). According to Ransdell, Oakland and Taylor (2003), obstacles to girls' participation can be environmental, sociological, or psychological (p. 37). Tappe, Duda and Ehrnwald (1989) found that for girls, the most critical obstacles to participation were "wanting to do other things with (their) time" and "lack of desire and interest" (p. 155). In addition, Stewart, Green and Huelskamp (1991) reported high school girls' rankings of activity areas differed from high school boys. If the interests of girls are not being met, they may find physical activity less meaningful and be less likely to participate (Cothran & Ennis, 1999).

Some researchers have found that the composition (mixed or same-sex) of physical education classes influences the participation of girls (Lirgg, 1993; Macdonald, 1990; Treanor, Graber, Housner & Wiegand, 1998). According to Treanor et al. (1998), middle school girls specifically believed they "performed skills and played sports better, received more practice opportunities, and were less fearful of injury in same-sex physical education" (p. 51). Macdonald (1990) found that high school girls believed coeducational classes were "more fun", but they worked harder in single sex classes. The girls in this study also indicated that teachers seemed to expect more of them in single sex classes than in coeducational classes.

In reviewing the literature, it is clear there are some differences in student attitudes toward participation in physical education that are related to gender. Based on this, it was important for the

public school teachers in this action research project to determine if gender would play an important role in the success of their new curriculum. Essentially, would the perspectives of boys and girls in this school system differ, and if so, how might that influence their participation in the physical education curriculum?

Methods

The PETP faculty and the teachers collaborated on the development and administration of a survey that would capture information about the curriculum and any perceived barriers to participation. The PETP faculty developed a list of possible items for the first draft of the survey from material gathered in the review of literature as well as from discussions with the Director of Physical Education for the school system, the department chairs, and the teachers. There were three main sections to the survey: demographics, why students choose to participate, and why students choose not to participate. The chairs reviewed this first draft and all subsequent revisions. The third draft was accepted for use in a pilot study.

The pilot study was conducted in a neighboring high school that was not part of the target school system. Feedback from the pilot resulted in some minor edits to clarify the items. The final revision of the survey was approved by the original school system and translated into Spanish. Both English and Spanish versions of the survey were distributed to all middle and secondary schools in the system. The survey was then administered to students in physical education classes over a one-week period.

Results

The school system contained four high schools and seven middle schools. The total number of surveys distributed was 7000 with 5308 returned for analysis, a response rate of 76%. The participants ranged in age from 11 to 20 years with a gender ratio of 49% male students and 51% female students. The ethnic breakdown of the

students was 4.0% Asian, 26.6% African-American, 30.4% Hispanic, 1.7% Russian, 34.1% White and 3.3% Other (see Table 1). Data were analyzed by school level (middle or secondary), gender, and ethnicity. Additional demographics, general results of the survey, and an analysis of responses by level (middle school compared to high school) have been presented in a separate paper (Couturier, Chepko & Coughlin, 2005).

Males and females differed in their responses to the survey in interesting ways. In examining responses to why students choose to participate in physical education, only 51.8% of females agreed they “like playing competitive team sports” compared with 81.5% of males. Only 47.6% of females agreed with “I am good at sports” in contrast to 79.4% of males. Similarly, 56.2% of females agreed that they “like to win” while 71.3% of males did. Males were also more likely to agree they participate in physical education because they “have fun” (76.2% males versus 64.8% females) and their “friends think it’s cool” (38.2% males versus 27.5% females). Over 71% of males agreed they “like physical challenges” while only 48% of females did. No significant differences between males and females were found for the following items: “I like getting out of class and moving,” “I like learning new games and activities,” “It makes me healthier,” “I like learning about my body and fitness,” and “I like participating in lots of different activities.”

Some differences were also noted in responses to statements that described how students feel about physical education. Females (29.1%) were more likely to agree than males (20.6%) that “I would like to do less competitive activities and more cooperative activities,” that “I would like to do more fitness activities” (43.7% versus 33.5%), and that “I would like to be able to work at my own pace” (60.4% versus 50.2%). Females (42.9%) were also more likely than males (31.8%) to respond they participate in physical education because “I have to.” Males, however, were more likely than females to agree that “Physical Education is as important as English

and Math” (48.5% versus 37.7%) and they participate in physical education because “I am getting better” (51.2% versus 42.3%). No significant differences between males and females were found on items such as “I would like to be able to pick my own activities,” “I would like to do a greater variety of activities,” “I would like to choose what group of students I work with,” “I would like to choose how hard or easy the task is,” and “I participate in physical education because I like the teacher.”

When asked why students might choose not to participate in physical education, males and females differed on many items. On environmental issues, females (54%) were more likely than males (34%) to agree they “hate having to bring and carry my physical education clothes in school” and they “don’t feel comfortable changing in front of others” (43.7% versus 27.5%). Females (37.2%) were also more likely than males (28.1%) to respond they “don’t feel comfortable changing in the locker room because it is not clean” and they “don’t have enough time to change” (64.8% versus 41.3%). Responses to curricular issues were generally similar for males and females. The two exceptions were in the area of competition. Males were more likely than females to agree they “hate to lose” (35.1% versus 24.2%) while males were more likely to disagree they “don’t like to compete” (56.6% versus 43.4%).

Many gender differences became evident on items related to social issues. Females (81.5%) were more likely than males (70.1%) to disagree that “I don’t participate because my religion says I shouldn’t.” Females were also more likely than males to identify concerns about personal hygiene as obstacles to participation. Over 48% of females agreed that “I don’t like to get sweaty in Physical Education” while only 26% of males agreed. In addition, females were more likely to agree that “I don’t like going to my next class all sweaty” (73.4% versus 56.2%). Females were more likely than males to respond that “I don’t like to get my hair messed up” (44.5% versus 18.7%) and that “I

am afraid of breaking nails” (20.3% and 11.2% respectively). Finally, females (43.8%) were less likely than males (54.5%) to disagree that “I don’t feel like participating in Physical Education class.” No significant differences were found for males and females on several items in this section. For example, no significant differences were found for “I don’t feel comfortable leaving my clothes in the locker,” “I don’t like the activities we are doing,” “I don’t like doing the same activities every year,” “I don’t like playing in classes with boys and girls together,” and “I am afraid other students will make fun of me.”

Several gender differences became evident when students were asked to rate their interest in various activities. Males (38.8%) were more likely than females (26.8%) to select individual sports or team sports as a first or second choice. Females (61.9%) were more likely than males (14.5%) to rate dance or fitness activities as a first or second choice. No significant differences were found in ratings for cooperative games or swimming between males and females. Overall, females were less likely than males to have participated in their last five physical education classes (60.6% versus 70.6%), or to have five friends that regularly participate in physical education (55.2% versus 65.9%), or to participate in physical activity outside of physical education (70.9% to 80.6%).

Discussion

The results of the survey clearly identify differences in perspectives between boys and girls within this school system with regard to physical education. Gender differences have been observed previously, but the large sample size of this study (more than 5300 students) makes these findings a powerful corroboration of much of the literature in this area (Allison, Dwyer & Makin, 1999; Cothran & Ennis, 1999; Lirgg, 1993; Macdonald, 1990; Ransdell, Oakland & Taylor, 2003; Stewart, Green & Huelskamp, 1991; Tappe, Duda, & Ehrnwald, 1989; Treanor et al., 1998). The study and its findings also reinforce the

importance of partnerships between colleges and school systems in identifying problems and generating data to effect change.

When examining the responses to the survey by gender, it should be noted that more similarities exist between boys and girls than differences. However, where differences do exist, they warrant attention. Large gaps were found between the responses of males and females with regard to activity preferences. Males were more likely than females to agree they were good at sports and males were also more likely to agree they liked competitive activities and physical challenges. Females were more likely to agree they liked to work at their own pace, wanted a less competitive and more cooperative environment, and would like more fitness activities. Most males selected team and individual sports as their first and second choice activities; most females selected dance and fitness. Females in this study clearly voiced a preference for a less competitive, more fitness oriented curriculum, supporting in part the findings of earlier studies (Luke & Cope, 1994; Marsh & Peart, 1988).

These findings also support the work of Kyles and Lounsbery (2004), who have identified a need to create physical activity programs that are attractive to girls, particularly non-athletic girls. In the case of this school system, teachers may have to stretch their own areas of expertise to include more dance, fitness, and cooperative activities to engage girls in physical education. There is, however, a risk that inclusion of sex-typed classes will further polarize student choices and reinforce gender stereotypes (Tannehill, Romar, O’Sullivan, England & Rosenberg, 1994; Vertinsky, 1992). Sensitivity in promoting these offerings will be critical to their general acceptance. It is also possible activities not specifically explored in this study may be attractive to both boys and girls. For example, outdoor activities such as kayaking, mountain biking, or climbing, may appeal to a wide range of students and carry less risk of gender stereotyping.

Although high school students enjoy coeducational classes, teachers must continue to address ways of grouping students appropriately to maximize participation. Classes that are designed to allow students to work at their own pace may be more comfortable for female students and some males. Additional suggestions include combining some single sex grouping within coeducational classes as well as using sound pedagogical techniques (progressions, modified games) to create a more equitable instructional environment (Chepyator-Thomson & Ennis, 1997; Gabbei, 2004).

Perhaps the most striking gender difference was the degree to which females identified environmental issues as reasons not to participate in physical education. Bringing clothes, discomfort with changing, time to shower and change, and going to class sweaty were all identified as barriers to participation for females at a much higher rate than males. Females also responded they "didn't feel like participating" more frequently than males and were less likely to participate in physical activity outside of physical education or have friends that participated. Clearly, the structural impediments to participation weigh heavily in females' decisions to participate. This finding supported the perceptions of the teachers that environmental issues beyond their control contributed to female students' decisions not to participate.

While issues surrounding showering and changing may seem like mere nuisances, they have much greater significance for the female students in this study and should not be overlooked. Physical educators have long been aware of these problems, but have had limited success in ameliorating them. In general, teachers will have to think beyond the conventional limitations of the physical education setting to consider more radical solutions. For example, teachers could work with the administration in altering the class schedule to permit classes before or after school (Scantling, Strand, Lackey & McAleese, 1995) and allow more time for changing and showering for regular classes. There

may be ways to make the setting more like a health club atmosphere, tapping into the fitness interest of girls. Students could be an excellent source of ideas for tackling these problems. Perhaps a separate research project, qualitative in nature, focusing on these barriers would provide useful information to address these critical issues.

Given the gendered perspectives of students in this school system with regard to environmental issues, it seems that boys are unintentionally privileged in physical education classes. They are comfortable in the physical education environment in a way girls are not. They generally have fewer issues with changing, showering, and bringing clothes for class. They are less concerned with being sweaty or messing up their hair. They are also more comfortable in a traditional curriculum that offers team and individual sports. Females in this study did not share this general comfort level with the environment or with traditional sport activities. These findings provided the teachers involved in the study with the evidence they needed to seek change. Based on the results of the action research project, the teachers focused on the environmental issues as the most critical barriers to student participation. The first step taken by the teachers was to lobby the school administration for improvements in the physical environment so that students would find the physical education experience more comfortable and inviting.

A second step would be to further examine the curriculum to determine if the offerings are balanced in meeting the needs and interests of both boys and girls. Failure to consider the differing perspectives of boys and girls toward physical education may exacerbate the already lower percentage of physically active females and turn off a generation of young women to physical education. Only by seriously considering the students' gendered perspectives, can we create an environment that is welcoming for all our students. For now, and despite the best intentions of physical education teachers, the gym still seems to belong to the boys.

REFERENCES

- Allison, K., Dwyer, J., & Makin, S. (1999). Self-efficacy and participation in vigorous physical activity by high school students. *Health Education & Behavior, 26*(1), 12-24.
- Chepyator-Thomson, J. & Ennis, C. (1997). Reproduction and resistance to the culture of femininity and masculinity in secondary school physical education. *Research Quarterly for Exercise and Sport, 68*(1), 89-99.
- Cothran, D. & Ennis, C. (1999). Alone in a crowd: Meeting students' needs for relevance and connection in urban high school physical education. *Journal of Teaching in Physical Education, 18*, 234-247.
- Couturier, L., Chepko, S., & Coughlin, M. (2005). Student voices—What middle school and secondary school students have to say about physical education. *The Physical Educator, 62*(4), 170-177.
- Gabbei, R. (2004). Achieving balance: Secondary physical education gender-grouping options. *Journal of Physical Education, Recreation and Dance, 75*(3), 33-39.
- Kyles, C. & Lounsbery, M. (2004). Project Destiny: Initiating physical activity for non-athletic girls through sport. *Journal of Physical Education, Recreation and Dance, 75*(1), 37-41.
- Lirgg, C. (1993). Effects of same-sex versus coeducational physical education on the self-perceptions of middle and high school students. *Research Quarterly for Exercise and Sport, 64*(3), 324-334.
- Luke, M. & Cope, L. (1994). Student attitudes toward teacher behavior and program content in school physical education. *The Physical Educator, 51*(2), 57-66.
- Macdonald, D. (1990). The relationship between sex composition of physical education classes and teacher/pupil verbal interaction. *Journal of Teaching in Physical Education, 9*, 152-163.
- Marsh, H. & Peart, N. (1988). Competitive and cooperative physical fitness training programs for girls: Effects on physical fitness and multidimensional self-concepts. *Journal of Sport & Exercise Psychology, 10*, 390-407.
- Ransdell, L., Oakland, D., & Taylor, A. (2003). Increasing physical activity in girls and women: Lessons learned from the DAMET Project. *Journal of Physical Education, Recreation and Dance, 74*(1), 37-55.
- Scantling, E., Strand, B., Lackey, D., & McAleese, W. (1995). An analysis of physical education avoidance. *The Physical Educator, 52*(4), 197-202.
- Stewart, M., Green, S., & Huelskamp, J. (1991). Secondary student attitudes toward physical education. *The Physical Educator, 48*(2), 72-79.
- Tannehill, D., Romar, J., O'Sullivan, M., England, K., & Rosenberg, D. (1994). Attitudes toward physical education: Their impact on how physical education teachers make sense of their work. *Journal of Teaching in Physical Education, 13*, 406-420.
- Tappe, M., Duda, J., & Ehrnwald, P. (1989). Perceived barriers to exercise among adolescents. *Journal of School Health, 59*(4), 153-55.
- Treanor, L., Graber, K., Housner, L., & Wiegand, R. (1998). Middle school students' perceptions of coeducational and same-sex physical education classes. *Journal of Teaching in Physical Education, 18*, 43 – 56.
- Vertinsky, P. (1992). Reclaiming space, revising the body: The quest for gender-sensitive physical education. *Quest, 44*, 373-396.

Dr. Lynn Couturier is on the faculty at the U.S. Coast Guard Academy, Dr. Stevie Chepko teaches at Winthrop University and Dr. Mary Coughlin teaches at Springfield College.

Table 1

Physical Education Survey Demographics

		Count	%
Male		2601	49
Female		2707	51
Ethnic	Asian	211	4
	African-American	1411	26.6
	Hispanic	1614	34
	Russian	89	1.7
	White	1809	34.1
	Other	174	3.3
Describe how you feel About school	like a lot	836	16.8
	school is ok	3239	65
	hate school	907	18.2
Grade in PE	A	2520	52.1
	B	1133	23.4
	C	525	10.9
	Below C	660	13.7
Do you participate in physical activity outside of class?	Yes	3749	74.9
	No	1258	25.1