

MIDDLE SCHOOL GIRLS' PERCEPTIONS OF THEIR PHYSICAL EDUCATION CLASSES AND TEACHERS

Debra L. Patterson^(A-F), Joanna Collins^(A-F)

California State University, Fullerton, Kinesiology, Fullerton, CA, USA

Abstract

Introduction: Providing meaningful opportunities for middle school students in physical education is one way to motivate them to continue to be physically active throughout their lifetime.

Objective: To assess the attitudes of middle school girls toward their physical education classes and physical education teachers.

Methods: Participants included 100 girls (ages 12-15 years) of primarily Hispanic ethnicity (92%), who voluntarily completed a 15-question survey representing mixed-methods (4 point Likert-type questions and open-ended responses). Data was analyzed using means and the constant comparative method.

Results: Analysis revealed 92% of the participants rated their physical education class as positive and 88% provided positive ratings of their teachers. Concerning co-educational classes 44% wanted a single gender class while 56% wanted the mixed gender classes. Regarding identifying their feelings on engagement with boys in specific team sports, 35% felt good, 24% felt okay, 34% felt it was negative, and 7% were unsure of their feelings. Only 32% were provided choice of activities. Physical activity engagement outside of school per week resulted in 16% participation in six hours or more while 83% indicated only 0-5 hours.

Conclusions: Middle school girls have unique needs in regards to motivation of positive engagement in physical education. It is important to determine the attitudes of physical education students' so physical educators can use the information to encourage continued participation in activity throughout life.

Key words: *motivation, physical education, physical activity, teacher impact*

Introduction

In recent years it has become increasingly more difficult to engage female students in physical education classes. It is important to determine the attitudes of physical education students so educators can use the information to encourage continued participation in activity throughout life [1]. Providing meaningful opportunities for middle school students in physical education is essential to motivate them to continue to be physically active throughout their lifetime. Physical education and physical activity can improve several aspects of girls' lives, including more positive perceptions of their body, greater self-confidence and an increased ability to think more independently [2].

Children and youth are more likely to continue participation in physical activities when their experiences related to those are positive, therefore it is critical that they have the opportunity to derive positive affect from their involvement in activity during childhood [3]. Outside participation in organized physical activity also enhances positive affect, choice, and future expectancies indirectly through achievement and social mediators [4]. There are several factors that can determine or contribute to a student's perceptions, including motivation, co-educational versus segregated Physical Education classes, gender appropriateness,

the effects of choice and interests, and the influence of their teacher.

Motivation seems to be one of the largest factors playing a role in the perceptions of middle school girls regarding their physical education classes. Motivation to learn can be defined in the pedagogical context as student willingness to engage in the content [2, 5]. The affective domain is where intrinsic motivation can be most easily observed. Personal interest and overall enjoyment of an activity can stem from intrinsic motivation. These are considered to be more positive outcomes than those found from extrinsic motivation. The outcomes associated with extrinsic motivation tend to be more negative outcomes due to the role of outside influences. Intrinsic motivation stems from internal perceptions and enthusiasm, whereas extrinsic motivation is derived from outside influences [6].

Motivation plays a key role in the amount of self confidence that the students possess. Students are more likely to actively participate when they are motivated to do so or when they find the activity motivating. Situational motivation can be described as the students' motivation levels at that exact moment during the activity. It is evident that positive social factors such as promotion of cooperative learning, emphasis on individual improvement, and choice of

tasks can lead to positive motivational outcomes in Physical Education [7].

Viewing activities as gender inappropriate generally seems to have a more detrimental effect on females than on males [8]. Many students have a preconceived notion that certain activities in physical education are not gender appropriate and are less likely to willingly participate in those activities. This seems to be more prevalent in girls than in boys. These differences may be influenced by the media and from society as a whole. The broadness of the social environment, including the cultural context in which students are involved, the role models available in the community and the exposure to media are also potential influences on student perceptions and attitudes [9]. The developmental studies have also indicated that children form gender differentiated perceptions of their abilities and interests in both cognitive and motor tasks before they even enter school [9].

Another way to improve perceptions about physical education is to provide the students with more choices. When students have more choices about available activities, there is an increase in intrinsic motivation, which results in more active engagement in the activities. This suggests that when students are given choice and autonomy in selecting learning activities, they are more apt to be motivated [10]. Interest plays a key role in the effectiveness of physical education. If students aren't interested in the activity, or the teacher does not make the activities interesting the result is lowered levels of motivation and less exertion of effort by the students. Personal interest should be nurtured during the learning process because it is the motivator that leads to persistent effort and achievement in learning [11]. Research has found girls are less active than boys and this is why it is important to target this particular group. The students may seem unmotivated to participate in the activities because they are not interested in the activities or in the competitive context in which many of the activities are presented [2].

There are several things to take into account with regard to co-educational physical education. Children are undergoing so many changes at this point in their lives, both physically and emotionally, and sometimes being in a co-educational setting is not beneficial and will result in factors that can negatively affect participation and activity level [12]. In contrast, if female students are not included into a coeducational learning environment in physical education they may lack the skills necessary to interact with boys, both in and out of the classroom. Physical education not only teaches individual skills, but group skills such as cooperation, and positive communication skills. Female students need to learn these skills and how to apply them to their outside lives, which are not single gendered. Thus, co-educational physical education classes can

be a great benefit to female and male students, as well [12]. More progress needs to be made in designing co-educational physical education programs that provide an equitable and productive experience to all middle school children [13].

Research has shown that the teacher is a primary influence of the overall motivational climate that is promoted in their classes. They can either enhance or hinder the level of motivation that is present in their physical education classes [6, 14, 15]. Implementing a variety of teaching styles has been found to have an influence on children's motivation in a relatively short period of time. Implementing a mastery climate as opposed to a performance orientation was associated with enjoyment, perceived ability, and effort [14, 16]. Physical Education teachers can create several types of learning climates in their classes by including a wide variety of movement opportunities for their students to experience [17]. The purpose of this study was to assess the attitudes of middle school girls toward their physical education classes and physical education teachers.

Materials and methods

A total of 100 girls were randomly selected as participants for this study. They ranged in age from 12 (2%), 13 (48%), 14 (47%) and 15 (3%) years of age (mean = 13.51 years, Standard Deviation = 0.59). They represented six ethnicities, but were primarily Hispanic (92%). Participation was voluntary and participant's responses remained anonymous. All participants and parents completed the University Institutional Review Board approved consent forms. To provide equity, forms were provided in both English and Spanish. The participants attended a public middle school located in southern California. The school had 1,800 students. All of their physical education classes were co-educational. The average number of students in each physical education class ranged from 45-60.

Participants were administered a survey which consisted of 15 open-ended and Likert-type questions. The survey was created using other research and developing questions based on the research [1]. The survey was further refined from a previous pilot study. The survey was administered to the participants by an advisory teacher rather than the physical education teacher. All participants completed the survey during a one hour time block at school. Each survey was assigned a number for inventory purposes. There were some participants who did not have the ability to read and write fluently in English, so the questions were translated into Spanish. Their answers were translated from Spanish to English during the data analysis of the study.

Data was analyzed using means and the constant comparative method [18]. The data was coded by the

researcher and recoded by a trained researcher to ensure the validity of the categories established. The independent researcher was trained on the instrument tool until 90% reliability was attained with the results and similar questions from a pilot study. The responses were placed into categories that emerged from the data. An inter-rater reliability of 100% was achieved while analyzing the data of this study using the primary researcher and the independent researcher.

Results

Ninety-two percent of the participants expressed an overall positive feeling about their physical education classes because the classes were challenging and fun way to exercise daily. The 8% who had a negative feeling about their physical education classes stated they didn't like the large classes and the boys were too rough and tough. Eighty-eight percent of the participants gave positive ratings of their teacher. Results indicated that 44% of the participants wanted to participate in

a single gendered class versus 40% who wanted the mixed gendered co-educational setting. The participants stated several reasons for wanting single gendered classes, including, feeling more confident about participating, the boys would not make fun of them and they would feel less scared. Several of the reasons for favoring participation in co-educational classes included mixed gendered classes challenge them to be more competitive and work on their cooperation. Participants were asked about their feelings on playing various sports with boys in physical education which included flag football, hockey, soccer and basketball. The results indicated on the average of the four sports, only 35% of the participants felt good about it, 24% felt okay, 34% felt it was negative and 7% were unsure about their feelings. One participant stated that she did not enjoy playing sports with the boys because the boys never pass the girls the ball because "they think we can't play." Participants were asked how often they choose their activities during class, 22% stated never, 46% said

Table 1. *Participants Questions and Responses (N=100)*

	Good	In Between	Not Good	None
What are your thoughts about physical education?	55%	17%	7%	21%
	1	2	3	4
Rate your Physical Education class on a scale of 1-4, 1 being bad and 4 being best.	1%	7%	54%	38%
On a scale of 1-4, with 1 being bad and 4 being best, please rate how you think it would be to have a Physical Education class with only girls.	22%	27%	20%	31%
What do you think of your Physical Education teacher? Rate your teacher on a scale of 1-4, 1 being bad and 4 being best.	4%	8%	29%	59%
	0-2	3-5	6-8	8+
Outside of school, how many hours do you think you are physically active?	31%	52%	12%	4%
	Never	Sometimes	Almost Always	Always
Rate how often you get to choose what activities you do in your Physical Education class.	1%	46%	23%	9%
	Good	Okay	Bad	No Answer
How do you feel about playing Football with boys in your Physical Education classes?	37%	16%	42%	5%
How do you feel about playing Hockey with boys in your Physical Education classes?	28%	28%	33%	11%
How do you feel about playing Soccer with boys in your Physical Education classes?	41%	25%	28%	6%
How do you feel about playing Basketball with boys in your Physical Education classes?	35%	27%	33%	5%
	Yes	Maybe	No	Not Sure
Do you think you would want to participate more if your Physical Education class was all girls?	44%	9%	40%	7%

sometimes, 23 % said almost always and 9% answered always. This indicates that participants were not given much choice in what activities they participate in during their physical education classes. Participants were asked how often they participated in physical activity outside of school each week, 31 answered 0-2 hours, 52 were 3-5 hours, 12 were 6-8 hours and 4 were 8 or more hours. This indicated that they are not very active outside of school in their free time.

Discussion

The purpose of this study was to assess the attitudes of middle school girls toward their physical education classes and physical education teachers. Consistent with the research [2], the results of this study indicated that 92% middle school girls had positive feelings about their physical education classes and 88% positive about their physical education teachers. There were many girls that were afraid to participate in certain activities with boys. These findings support previous research [1, 8, 9, 20] which found the same or similar results.

Finding ways to motivate students to incorporate physical activity into their everyday lives should be a mission for all physical educators [2, 5]. Physical educators need to be willing to shift their paradigms and be open to trying new things so the students won't be bored and complacent with the traditional sports curriculum year after year. Providing the students with more activities that interest them is a great way to motivate them to be active on a regular basis [6]. This suggests that when students are given choice and autonomy in selecting learning activities, they are more apt to be motivated. Research indicates that if students are given a choice of activities that they will be more willing to participate in their physical education classes [19]. There are still many factors that play into the levels of efficacy and motivation in middle school aged children. Further research needs to be conducted regarding the motivation and perceptions of middle school girls regarding physical activity in general. One way is to ensure that the content being taught is relevant to students as individuals and to incorporate learning activities that help students make connections between the content and their everyday life [8].

In order for physical educators to help combat the adolescent obesity and juvenile diabetes epidemics, they need to have a better understanding of their students. Teachers need to understand that not every student is comfortable with the opposite gender, while others are not fazed by gender differences. But if interest and choice are two main components to the motivation of female students, and almost half the respondents feel a certain way; this may be a critical issue that future research needs to address. Many of the participants mentioned that they felt like they weren't as skilled in certain activities as the boys, which af-

fected their level of participation. Allotting more time for skill drills in girls-only classes may help meet skill development needs [20].

High physical activity levels are only one of the objectives of physical education teachers. The allocation of more time for skill development in a girls-only class may better address the educational needs of some adolescent girls, without the added stress of competitive game play [20, 21]. In addition having split gender lessons could help the girls become more comfortable in mastering the necessary skills of the activity. This gender separation ensures that girls have adequate opportunities to develop skills during a lesson or unit [21]. Single gender physical education classes can and should be provided, as long as they offer the same and equal access to the physical education curriculum as other classes. Students could be given a choice as to what type of physical education class they are to participate in. They can choose between single gendered or co-educational classes. That way the students are more comfortable and more likely to have an enjoyable experience in their physical education class, and it can focus more on skill development and less on game-like competitions.

The intention of this study was to identify factors that may be influencing female students to behave or perform certain ways in their physical education class. The results of this study can be used by physical educators to implement more activities into their curriculum and be more aware of their students' feelings and attitudes towards physical education. Providing a variety of activities in single and mixed gendered classes will encourage students to incorporate these activities into their daily lives and outside of the school setting.

Declaration of interest

The author reports no conflicts of interest.

References

1. Ryan S, Fleming D, Maina, M. Attitudes of middle school students toward their physical education teachers and classes. *Phys Educ*, 2003; 60: 28-43.
2. Johnson I. Using motivational strategies to promote female-friendly physical education. *J Phys Educ Rec Dance*. 2003; 74: 19-22.
3. Haywood KM. The role of physical education in the development of active lifestyles. *Res Q Exerc Sport*. 1991; 62: 151-6.
4. Duncan S. The role of cognitive appraisal and friendship provisions in adolescents' affect and motivation toward activity in physical education. *Res Q Exerc Sport*. 1993; 64: 314-24.
5. Burke DJ. Connecting content and motivation: Education's missing link. *Peab J Educ*. 1995; 70: 66-81.
6. Caja E, Weiss M. Predictors of intrinsic motivation among adolescent students in physical education. *Res Q Exerc Sport*. 2000; 71: 267.
7. Ntoumanis, N. A self-determination approach to the understanding of motivation in physical education. *Br J Educ Psych*. 2001; 71: 225-42.
8. Solomon M, Lee A, Belcher D, et al. Beliefs about gender appropriateness, ability, and competence in physical activity. *J Teach Phys Educ*. 2003; 22: 261-79.

9. Lee A. Contributions of research on student thinking in physical education. *J Teach Phys Educ.* 1997; 16: 262-77.
10. Prusak K, Treasure D, Darst P, et al. The effects of choice on the motivation of adolescent girls in physical education. *J Teach Phys Educ.* 2004; 23: 19-29.
11. Hidi S. An interest researcher's perspective: The effects of extrinsic and intrinsic factors on motivation. In: Sansone C. & Harachiewicz JM eds. *Intrinsic and extrinsic motivation: The search for optimal motivation and performance.* San Diego, CA: Academic Press, 2000; 309-339.
12. Hedlund R, Keinman I, Davis K, et al. Should physical education classes return to teaching males and females separately? *J Phys Educ Rec Dance.* 1999; 70: 11-14.
13. Sinclair C. How do adolescents perceive coeducational and same-sex physical education classes? *J Phys Educ Rec Dance.* 2000; 71: 9.
14. Cecchini J, Gonzalez C, Carmona A, et al. The influence of the physical education teacher on intrinsic motivation, self confidence, anxiety, and pre and post-competition mood states. *Eur J Sport Sci.* 2001; 1: 4.
15. Goudas M, Biddle S, Fox K, et al. It ain't what you do; it's the way you do it! Teaching style affects children's motivation in track and field lessons. *Sport Psych.* 1995; 9: 254-64.
16. Alexander K, Luckman J. Australian teachers' perceptions and uses of the sport education curriculum model. *Eur Phys Educ Rev.* 2001; 7: 243-67.
17. Mowling CM, Eiler K, Brock SJ, et al. Breaking down barriers: Student motivation in physical education. *J of Phys Educ Rec Dance.* 2004; 75: 40-51.
18. Glaser BG, Strauss A. *The discovery of grounded theory: Strategies for qualitative research.* Chicago, IL: Aldine Publishing, 1967.
19. McKenzie T, Prochaska J, Sallis J, et al. Coeducational and single-sex physical education in middle schools: impact on physical activity. *Res Q Exerc Sport.* 2004; 75: 4. 446-49.
20. Ward S. Activity levels in coeducational or single-sex physical education classes. *J Phys Educ Rec Dance.* 2005; 76: 8.
21. Shimon J. Red alert: gender equity issues in secondary physical education. *J Phys Educ Rec Dance.* 2005; 76: 6.

Received: October 23, 2011

Accepted: March 15, 2012

Published: March 30, 2012

Address for correspondence:

Debra L. Patterson, Ph.D.

California State University, Fullerton, Kinesiology

800 N. State College Blvd, KHS 231

Fullerton, CA 92834-6870, USA

Tel. 657-278-8337

dpatterson@fullerton.edu

Joanna L. Collins: Joanna.collins@vistamiddle.net