

# High School Girls' Perceptions of Selected Fitness Activities

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## Abstract

*High school students, and particularly girls, are not very active (Centers for Disease Control and Prevention, 2006). To help girls develop the abilities to enjoy lifetime, healthy physical activity, physical educators need to provide curricula that will achieve this goal. In the process, they need to make sure they are aligned with the current trends and interests of their students. Fitness activities such as Pilates, kickboxing, and core training have become popular at fitness centers and some physical educators are incorporating them into their curricula. There is a lack of research examining students' views of these activities. This study examined 83 high school girls' perceptions of selected fitness activities, after participating in several fitness units. From the students' comments, 74% of the girls preferred fitness units to sports units. Eight themes were identified from student comments showing that students found the fitness activities to be: health-promoting, fun and varied, more physically active, easier skills than sports, good lifetime activities, easy to schedule outside of school, a help in increasing other abilities, and not competitive. The findings reinforce the need for high school physical educators to include such activities as options in their high school curricula to motivate girls to be more active.*

According to the National Association for Sport and Physical Education (2004), "The goal of physical education is to develop physically educated individuals who have the knowledge, skills, and confidence to enjoy a lifetime of healthful physical activity" (p. 11). Yet less than

half of high school students exercise for at least 60 minutes per day (Centers for Disease Control and Prevention, 2006). Only 27% of high school girls and 43% of high school boys exercise for at least 60 minutes per day. So, of the two genders, girls are particularly inactive.

This decrease in girls' physical activity could be linked to the fact that during adolescent years, a high percentage of girls don't like physical education classes (Luke & Sinclair, 1991). Studies (Dunbar & O' Sullivan, 1986; MacDonald, 1990) suggest that physical educators create a less positive environment for girls than they do for boys. Research (Orme, 1991; Kientzler, 1999) indicates that less active girls are bored with playing traditional sports. All of these factors put adolescent girls at risk for unhealthy lifestyles. Kyles and Lounsbery (2004) state the need to create physical activity programs that are attractive to girls, particularly non-athletic girls. As high school physical education teachers analyze their curricula to see how they can effectively accomplish NASPE's goal for physical education, they should consider whether or not they are aligned with the current trends and interests of girls in order to motivate girls to be more active.

Couturier, Chepko, and Coughlin (2007) asked middle and secondary school students to rate their interests in various activities in physical education. They found that secondary school girls were more likely to rate dance or fitness activities as a first or second choice, whereas boys were more likely to choose individual sports or team sports as a first or second choice. In Rikard's (2006) study, both genders were accepting of fitness activities due to the attendant health benefits. Students also wanted more variety in

fitness activities offered in the physical education curriculum (Rikard, 2006; Bibik & Goodwin, 2007). Hensley (2000), in a study of 386 four-year colleges and universities, found that 80 percent of student respondents preferred fitness or aerobic activities, and they felt that the most important outcome of college physical education classes was to facilitate lifelong participation.

This preference for fitness-related activities is in stark contrast to the findings of Hannon and Pellet (2005), who found that high school students preferred basketball and soccer to running and step aerobics. This preference for sports activities is in line with other past research findings (Rice 1988, Strand & Scantling, 1994; Tannehill & Zakrajsek, 1993). However, most of these studies only offered a limited variety of fitness activities (Rice 1988, Tannehill & Zakrajsek, 1993; Hannon & Pellet, 2005), and running/jogging was common to all of them. Luke and Sinclair (1991) found school children reported that one of the least favorable aspects of physical education was running.

Over the last several years a variety of non-traditional fitness activities are being offered in fitness centers. For example, it is difficult to find health clubs/fitness centers that have not introduced Pilates as an activity. Whereas much of traditional weight training relies on performance goals, Pilates stresses body alignment and the requirements to successfully complete the exercise (Feigin & Harris, 2008). Kloubec and Banks (2004) have suggested ways to incorporate Pilates into the physical education curriculum.

Core training is another fitness activity offered in fitness centers. It consists of a strength-training program that can improve movement patterns, posture, and prevent injuries (Pierce, Nichols, & Herman, 2007). Pierce et al. describe how physical educators can teach core training to accommodate varying fitness levels of students. Other non-traditional fitness-related activities include: yoga, kickboxing, and spinning. These activities are just some of the alternatives that have begun to be introduced at the high school

level to increase the variety of activities offered. This could help generate interest in fitness activities, not just while students are in school but outside of school, and such activities could ultimately become a lifetime activity.

Some schools have introduced these newer fitness activities into their high school curricula. Do high school girls like the activities? There is a lack of research examining students' views of such activities. The overall purpose of this study was to find out girls' perceptions of selected fitness activities. The aim of the study was to answer three main questions:

- 1) Which do girls prefer, fitness units or sports units?
- 2) What are the reasons for girls' unit preference?
- 3) What are girls' perceptions of the benefits (if any) of fitness units?

## Method

### Participants

Eighty-eight girls at a high school in the Intermountain West were the participants in this study. The students were enrolled in three sections of a tenth grade Fitness for Life course. Classes met two or three times a week (on a block schedule) for the semester. Each class session lasted 90 minutes.

### Data Sources

**Questionnaire.** A short questionnaire was developed by the researchers and was comprised of the following two open-ended questions: 1) *Which do you prefer, sports units or fitness units? Give reasons for your choice.*, and 2) *What benefits, if any, do you see from participating in these fitness units?* Open-ended questions were used to encourage the girls to give full, meaningful answers about the units using their own knowledge and/or feelings.

**Field Notes.** Field notes are often used in qualitative research in physical education research (James, Griffin, & Dodds, 2008; Chen, 2004) and

can be a rich data source. These notes consist of insights, emerging ideas, and summaries of conversations obtained throughout the data analysis process (Bogdan & Biklen, 1998). So the researcher took field notes of insights, ideas, and thoughts on student conversations about the fitness units in a notebook while the students completed the questionnaire, and also throughout the data analysis process.

### **Procedure**

The physical education teacher of the three sections of the tenth grade Fitness for Life course had taught physical education for 15 years at the secondary level and was also an aerobics instructor at a nearby fitness center. She blended the teaching of fitness concepts into two-week fitness units where she also introduced the students to different fitness activities. The teacher selected specific activities to make sure all fitness components were addressed: cardiovascular fitness, muscular strength and endurance, flexibility, and body composition. Unit fitness activities were: aerobics, step aerobics, kick boxing, Pilates, core training (using mats, balls, bands, and dumbbells), and fitness games. At the beginning of each unit the teacher utilized student leaders at the front of the class, while she taught. This enabled her to circulate and give feedback. Once she had taught activity routines, she allowed students to use the microphone and lead the class in these routines for part of the class while she continued to circulate and give feedback. If students really liked one or more of these activities, they could sign up for longer units (that run for the whole semester) in the Lifetime Activities class, where they can choose from the following combinations: core training/kickboxing/weight training, Pilates/core training, or a cardio aerobics/step aerobics/toning class.

Prior to this tenth grade course, the students had all participated in numerous sports units since they were in seventh grade. In seventh grade they had taken a Beginning Team Sports Activities course, and in eighth grade they participated in an

Intermediate Activities course. This latter course included team sports e.g. soccer, basketball, volleyball; and dual sports, e.g. badminton and tennis. The ninth grade class was a Participation Skills and Techniques course, which covered some sports, but also introduced students to individual activities e.g. bouldering and aerobics.

During the fitness units, signed informed consent forms were received. The week following the completion of the last two-week unit in the Fitness for Life classes, 83 of the 88 students completed the short questionnaire. Student numbers on the questionnaire insured student anonymity. The issue of anonymity was explained to the students during class time. Students were encouraged to be honest and thorough in their answers to the questions.

### **Data Analysis**

The students' comments from the questionnaire were inductively analyzed using the constant comparative method (Glaser & Strauss, 1967). Comments were identified, coded, and categorized according to topic, and compared with other students' comments to determine common themes. Through this process of comparing comments, several themes became apparent, for example, *Health Benefits* was one of the themes. Comments categorized under each theme were further examined to confirm, disconfirm, or combine prior insights about the comments or even to form a new theme. Data from the field notes was used to guide the data analysis process in the formulation of themes and used to explain the themes in more depth.

### **Peer Debriefing**

To help avoid bias on the part of the researcher and ensure the students' responses were correctly interpreted during data analysis, a university pedagogy professor with physical education experience was asked to review and assist in analyzing the data. He met with the primary researcher to discuss themes as the findings were analyzed. This role is known as the peer-debriefer

Table 1

*Themes: Benefits from Participating in Fitness Units*

<u>Theme</u>	<u>Number of comments</u>	<u>% total comments</u>
1. Health benefits	46	31
2. Fun/Variety	22	15
3. More physically active	20	14
4. Easier skills than sports	15	10
5. Lifetime activities	11	8
6. Easy to schedule outside of school	10	7
7. Increases other abilities	10	7
8. No competition	5	3
9. Other	8	5
TOTAL	147	100%

(Hanson & Newburg, 1992). All questions raised by this expert were discussed and appropriate revisions of comment allocation to themes, and theme titles were made.

### Results

Most of the 83 girls preferred fitness units (74%), 18% preferred sports units, and the remaining 8% of students liked both fitness and sports units equally well. The girls gave reasons for their preferences, commenting on the pros and cons of both types of units. Their views about the fitness units will be addressed first.

#### Fitness Units

From the students' comments about fitness units in their responses to the questions, eight themes were identified. Table 1 shows these themes and the number of comments that fall under each theme.

**Theme 1: Health benefits (31% of comments).** Girls clearly recognized the importance of the health benefits of the fitness activities, as the highest number of comments fell under this theme. Students felt they were becoming more fit as a result of participating in the fitness units. One student said, "I still enjoy

sport units, but I feel like I'm getting more physically fit in the fitness units." Another girl stated, "I actually have a firmer stomach. It's so cool!" Other positive benefits that students mentioned were: improvement in cardiovascular fitness, improved strength and endurance, the units helped in losing weight, the activities didn't make them feel as tired, they had fun while getting fit, they looked better, and they liked learning the fitness concepts. One girl summed up her feelings about the improvement she had made, "Now I am more physically active in many ways than before and some of the things that before I couldn't do I now can do."

**Theme 2: Fun/Variety (15% of comments).** Some of the students liked the variety in the fitness units and really enjoyed them. One girl stated, "Although sports are fun and provide good exercise, the fitness activities that we have done are as entertaining and effective as sports." Another said, "Fitness units are actually a lot more exciting than what they seem. They're similar to sports, you exercise while having fun, only that you concentrate on all parts of fitness." One girl liked the new activities that had opened a new area of exercise for her, "It's fun to try these new exercises because then I know you don't have to play a sport to stay fit. The benefits I see from

doing these exercises are staying fit and having fun while doing it.”

**Theme 3: More physically active (14% of comments).** Girls felt they were getting more daily exercise and working harder than in sports units. One student noted, “With fitness units you are working harder than in sports and you can see the outcome of it. I see that I am losing weight, and am stronger.” Another girl stated, “I feel we get more exercise in fitness units. I feel the benefits are getting more strength, feeling better about myself and looking great.”

The enjoyment factor seemed to help some girls to ignore the difficulty of being more physically active, “I have liked the fitness units and I definitely want to keep up with it. Some benefits I’ve noticed are that you aren’t killing yourself working out, it’s just a nice workout and a lot less impact on the joints.”

**Theme 4: Easier skills than sports (10% of comments).** Several students felt the skills required in the fitness units were easier to do than the skills in sports units. One girl reflected, “I am a girl who loves to dance, and I love the different activities we did! I am not all that coordinated in traditional sports, so this was a blast!” Another commented, “I really like that they don’t require excessive amounts of coordination because I have none.”

Some students felt that as a result of the easier skills, it helped create an inclusive environment. One girl said, “Not everyone can do sports, but everyone can do a version of the fitness units.” Another stated, “I like them because they aren’t so skill related. Everyone can do these fitness units. They don’t take specific talents like sports do.” Desire seemed to be a more important criterion than skill for some as evidenced by this particular comment, “You don’t have to be athletic which I am not, to do it. You just have to want to do it.”

Students also appreciated the fact that they had the teacher participating with them, who acted as a demonstrator for them throughout the class, making it easier to learn the skills. One student said, “I liked these units way better than sports

because it was easier to follow along with the teacher.”

**Theme 5: Lifetime activities (8% of comments).** From responses it was clear that some students could see that these activities would be good lifetime activities. One girl noted, “Fitness activities will probably carry over after my schooling more than sports will.” Another girl thought fitness activities would be particularly useful as one grew older, “I believe that I could do these when I am older and I can’t go running or play a sport every day.” Finally, in addition to being a lifetime activity it was clearly important to this student that the activities helped one be fit, “Fitness units are definitely better for when you grow up and for maintaining good fitness for life.”

**Theme 6: Easy to schedule outside of school (7% of comments).** An advantage of fitness activities was ease of scheduling outside of school. Students liked the fact that they didn’t need a team to participate in most of these fitness activities. They could do them on their own if they wanted to. A couple of girls commented along these lines: “With the fitness units, you don’t need other people you can always do any of the things we learned. With sports you need others to play with or against.” “You can do these activities by yourself. You don’t need to rely on others. For example, you can do Pilates by yourself, however for football you would need at least seven other people.”

Girls liked the fact that they could do these fitness activities on their own, at home, or at the gym if they wanted to, “I liked these because you can do these by yourself and at your own house or you can take a class at the gym.” Other comments focused on ease of scheduling because students didn’t need a lot of equipment in some of these fitness activities compared to many sports.

**Theme 7: Increases other abilities (7% of comments).** The atmosphere that was generated in the fitness units helped some girls develop other abilities. A few girls found the non-threatening environment helped them feel more confident than when they were in sports units. One girl said,

“You don’t get embarrassed because you’re not good at sports.” Another said, “You don’t have to worry about not being good because everyone can do fitness units.”

Several girls felt their tenacity improved, “In fitness units, I see that I don’t give up and I want to do better instead of giving up because I’m not winning. I also like that we move continually it keeps me pumped and I want to continue to go.”

One girl felt that after participating in the fitness activities, her ability to focus improved. She said, “I focus better during the day after class.” Some girls also said they felt happier and had more energy, “I feel happier all the time now. Also I feel like I have more energy in the day.”

**Theme 8: No competition (3% of comments).** A few students liked the fact that there was no competition in the fitness units: “I like fitness units a lot better. There isn’t competition against another team, just my past abilities against my future improvement, and it doesn’t feel like I’ve let someone down if I miss something.” Another girl said, “Honestly I would rather do step aerobics than play a sport. You don’t have to be beating anyone else besides yourself.”

### **Sports Units**

Of the 18% of girls who preferred sports units to fitness units, most of the reasons they gave for preferring sports were due to the fun factor of sports. Others preferred playing a game and liked the competitive nature of sports. Some mentioned that they enjoyed the movement involved in sports, plus they liked working on the skill and coordination necessary in sports, and felt that they were actually more skilled at sports.

Other individual student responses were negative comments about fitness units: the fitness units made students very sweaty right before a biology class, and students didn’t like memorizing the routines in fitness units which they felt were too much like dance.

## **Discussion and Implications**

Although a few girls preferred sports units to the fitness units in this study, the majority of the girls did prefer the fitness units. This is in contrast to some earlier research on student preferences (Hannon & Pellet, 2005; Rice 1988; Strand & Scantling, 1994; Tannehill & Zakrajsek, 1993). Most of these studies only offered a limited variety of fitness activities (Rice 1988, Tannehill & Zakrajsek, 1993; Hannon & Pellet, 2005), and running/jogging, which many students dislike (Luke & Sinclair, 1991), was common to all of them.

Many of the students in this study found the fitness units: created a more physically active environment with health benefits, were fun, varied, consisted of easier skills than sports, and were good, non-competitive lifetime activities that were easy to schedule outside of school. These themes account for the majority of girls preferring fitness units to sport units.

There is obviously a real difference in the variety these activities provided compared to traditional fitness activities such as running. This possibly enhanced the fun factor that the girls mentioned as they were exposed to the different activities.

Several of the girls liked the fitness activities because they found the skills easier to learn than many sports skills. This apparently helped make activities like core training, Pilates, kickboxing, aerobics, and step aerobics attractive to girls and possibly particularly attractive to non-athletic girls. This aligns with suggestions made by Kyles and Lounsbery (2004) regarding the need to create physical activity programs for all girls, especially non-athletic girls.

Students made the connection that these were good lifetime activities that they could easily do on their own at home, rather than having to find a team to play a sport or go to a specific facility. Although because of their newly found enjoyment of certain fitness activities some of the girls were prepared to do the latter and go to a fitness center.

The researcher recorded in field notes that several girls had made comments about the fitness activities to one another after class. One student remarked that Pilates was her favorite class in high school and that she lived for this activity, as it had become the highlight of her week. A couple of other girls overheard her making this comment and also mentioned that they enjoyed Pilates so much that they had signed up to take a class at a local fitness center and were hoping to train to become instructors in the activity.

Based on the comments of the high school students in these classes, the majority of the girls had a real interest in these fitness activities. Since we need to do all we can to motivate high school girls to be more active, the findings of this study reinforce the need for high school physical educators to include such activities as options in their high school curricula. It appears that an infusion of such activities could help fulfill NASPE's (2004) goal of physical education, "to develop physically educated individuals who have the knowledge, skills, and confidence to enjoy a lifetime of healthful physical activity" (p. 11).

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