

## PEDAGOGY

# Upper Elementary School Student Perceptions of Physical Education: High Attitude and Moderate/Low Attitudes

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## Abstract

*This study examined the perceptions of upper elementary school students toward physical education (PE). High and moderate/low attitude students ( $N = 16$ ) participated. Two themes emerged: (a) it is important to have fun in PE (students are excited to go to PE, PE is their favorite class, the teacher influences perceptions of fun) and (b) class activities are important (moderate/low students enjoyed team problem solving, fitness activities were controversial). The results suggest that class organization and content influence perceptions.*

Every day students bring their perceptions to school. These perceptions influence their thoughts and feelings toward each subject and their approach to learning. It has been suggested that student perceptions have a strong influence on learning (Entwistle, McCune, & Hounsell, 2002). These perceptions can influence whether stu-

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dents choose to participate in learning and how hard they work in class (Pajares, 1992; Zimbardo & Leippe, 1991).

In physical education (PE), where students often have strong views toward the subject matter, a great deal of information about student perspectives that can inform the teaching and learning process has been learned (Bernstein, Phillips, & Silverman, 2011; Cothran, Kulinna, & Garrahy, 2003; Graham, 1995; Hopple & Graham, 1995; Portman, 1995; Ravizza & Stratton, 2007). For example, Hopple and Graham (1995) interviewed PE students and found that many aspects of the mile run test influenced their perceptions of physical activity and fitness testing. Studies of student perceptions in PE have provided a diagnosis of instructional practices and suggestions for improving learning of motor skills, fitness, and student attitude.

Upper elementary school is a formative time for students to develop attitudes and perceptions toward PE and physical activity. Student declines in attitude have been suggested to begin by fourth grade and continue to decline until students graduate from high school both in the United States and abroad (Montalvo & Silverman, 2008; Phillips & Silverman, 2015; Subramaniam & Silverman, 2007). A person's physical activity levels begin to decline after adolescence (Sallis, Prochaska, & Taylor, 2000), and PE has been suggested as a way of remediating this decline (Carlson, 1995; Ennis, 1996; Portman, 1995; Robinson, 1990). As government funding, both local and federal, continues to support PE programs with staffing, space, and resources, it is important that we understand how these programs are affecting our youth. Understanding upper elementary students' perceptions of PE can provide an important perspective on their thoughts and feelings before declines in attitude and physical activity take place.

The decline in physical activity (Sallis et al., 2000) has resulted in an obesity epidemic among children (Flegal, Carroll, Ogden, & Curtin, 2010; U.S. Department of Health and Human Services, 1996). Obesity is associated with significant health problems for children and is an important early risk factor for adult morbidity and mortality (Krebs, 2003). One of the major combatants of obesity is physical activity, which should be encouraged among children and adolescents, based largely on the assumption that the behavior will become part of the person's life and carry into adulthood (Kohl

& Hobbs, 1998). It has been suggested that if a student has a positive experience in PE and develops a positive attitude about physical activity, motivation to engage in physical activity outside of school is likely to occur (Solmon & Lee, 1996). Conversely, students who show unfavorable attitudes toward PE may refrain from indulging in physical activity outside of school (Carlson, 1995; Ennis, 1996; Portman, 1995; Robinson, 1990).

These notions are supported by the theoretical framework guiding this study, the Theory of Reasoned Action developed by Fishbein and Ajzen (1975). This theory states that a person's attitude guides his or her behaviors. According to the Theory of Reasoned Action, a person's behavior is decided by his or her intention to perform the behavior (Ajzen & Fishbein, 1980). This intention is influenced by the person's attitude and belief systems toward the behavior. For example, if a person enjoys jogging and thinks jogging is important, the person is more likely to jog. Delving deeper through this study, we find that student perceptions are tied to their beliefs and can influence their attitudes.

Attitudes begin to develop at a young age (Allport, 1935), yet little is known about the early development of student attitudes toward PE. Middle school student perceptions suggest that low-skilled sixth-grade students have definite attitudes toward PE (Portman, 1995). Research also has suggested that sixth- through eighth-grade students' attitudes toward PE are influenced by their enjoyment, perceived usefulness, and feeling of belongingness (Subramaniam & Silverman, 2000). It is unknown if upper elementary school students have these same perceptions. While many people make assumptions about elementary school student experiences, there is no current research on the topic.

There are two primary purposes of this study. The first purpose is to find out what are the perceptions of upper elementary school students toward PE. A secondary purpose is find out what influences fourth- and fifth-grade students with high (or positive) attitudes and moderate (indifferent) and low (negative) attitudes toward PE.

## Method

This mixed methods study included the instrument results, interview, and observation data analyses. This section explains these steps. The study took place over one academic year.

## Setting

Students at a school in an upper- to middle-class suburban area were chosen to be the pool for interview selection. The school was fairly diverse with 11.2% speaking Spanish and smaller populations speaking Hebrew, Russian, Arabic, Turkish, and Lithuanian. The teacher at the school had nearly two decades of PE teaching experience as well as an extensive background as a fencing coach and was thought to be a successful teacher among the administrators within the district. The students had PE twice a week for 40 min and health once a week for 40 min. The curriculum included units on fundamental motor skills, teamwork and cooperation, and dance. The mission of the program was to help children develop the physical competencies that lead to confidence and participation in physical activity for a lifetime.

## Instruments

An attitude questionnaire that assesses student attitude toward PE with scores that have been shown to be reliable and valid (Bernstein et al., 2011) was administered to 146 fourth- and fifth-grade students. Sixteen students with the highest and lowest attitudes toward PE were selected. Two high attitude (HA) female students in fifth grade, two HA female students in fourth grade, two moderate to low attitude (MLA) female students in fifth grade, two MLA female students in fourth grade, two high HA male students in fifth grade, two HA male students in fourth grade, two MLA male students in fifth grade, and two MLA male students in fourth grade were asked to participate in an interview. Once Institutional Review Board clearance was obtained and the eight HA students and the eight MLA students agreed to participate, interview and observation dates and times that were convenient for the school and lead researcher were set up.

## Observations

Observations of each student in the study were done once before the first interview and then once after the first interview. Field notes and reflective notes were taken during the observations. The observations took place in the gymnasium and outdoors on the field and blacktop areas. The researcher was invited to the school picnic and

spent the day conducting observations, in addition to the 16 observations originally scheduled.

## **Interviews**

Once the student and researcher met, the initial objective was to make the student feel as comfortable as possible. First, the student was asked to create an alias to secure anonymity. The student was reminded of the option to stop the interview and leave the study at any time. The interviews were digitally recorded.

Each student was interviewed in a semistructured manner twice for approximately 40 min each. The semistructured nature of the interview allowed the researcher to use the initial listing of interview questions as a guide so that the interview could go in various directions for the researcher to elicit responses as needed. The first set of interview questions asked the students to describe their typical experience in PE class, what they like and dislike, what their friends think about PE, what they think about PE in general, and what they think influences student attitudes toward PE, among others. The second set of interview questions was guided by the answers to the first set of questions. The participants were asked how they feel when they know they have PE that day and how they feel about class, whether they feel they are good at PE, how they feel about their academic classes and how that relates to PE, to describe positive and negative experiences in class, how they feel they perform in class, and finally, if there is anything else they would like to offer.

## **Interview and Observation Data Analysis**

After the students were interviewed and observed, data were transcribed. Once the data were ready, the interview transcriptions, observation field notes, and reflective notes were entered into NVivo10. These data were then analyzed for common themes and patterns via the constant comparative method (Bogdan & Biklen, 2007). From this analysis, themes emerged.

## **Trustworthiness**

The main threat to the validity of this study was researcher bias (Maxwell, 2005), so it is important that the background of the researcher is noted. The lead researcher, who collected and initially analyzed the data, is a former Teacher of the Year elementary school

PE teacher. She enjoys and values physical activity and has experience in teaching PE preservice teachers. As data were analyzed, she remained aware of subjectivity to the material (Peshkin, 1988). This awareness was maintained through constant self-monitoring. The self-monitoring process was done through a reflective journal, which allowed the researcher to reflect upon the lens through which the data were collected and analyzed.

Member checks were done with the participants. These were done at the school following the interviews and observations. The member checks were approximately 10-min meetings with each of the participants during their lunch or recess time, during which notes were taken. Students were given the opportunity to hear what the researcher determined from their individual interviews and observations and were encouraged to either agree, contradict, or elaborate on the findings. Only one student did not feel that her feelings regarding her teacher were properly understood, and corrections were made to the data to reflect her perceptions correctly.

Triangulation occurred during data analysis. The items used in data triangulation were the observations and field notes, interview transcripts, and student attitude scores. All three items were reviewed across each subject. Negative case checking was done following theme determination.

Peer review was conducted following theme creation. The peer reviewer was one of the coauthors, a researcher with a doctorate in PE. The peer reviewer read through the interview transcripts, field notes, and themes created, to determine if the themes were appropriate with the data available. Three rounds of theme revisions were conducted until the peer reviewer and lead researcher agreed.

## Findings

Two major themes emerged during the analysis of the data from interviews and observation field notes from 16 students. In response to the questions inviting these students to describe their PE class and how they felt about it, all students voiced that it is important to have fun in PE class. The first theme, the importance of having fun in PE class, emerged and was expressed by students with high, moderate, and low attitudes, by males and females, and in both grade levels. This theme had three related subthemes: (a) students are excited to go to PE class, (b) PE is their favorite class, and (c) the teacher influ-

ences what they perceive as being fun. The second theme was class activities are important to them. This theme permeated gender and grade level with the only difference being between the HA and MLA students. This theme had two subthemes, namely, (a) MLA students enjoy team problem-solving activities and (b) fitness activities are controversial. This section elaborates these findings.

### **Physical Education Class Is Fun**

Students in observations and interviews indicated that they enjoy PE class because it is “fun.” All HA and MLA students expressed that they feel PE is fun, although for varying reasons. This theme emerged during all interviews and observations.

During interviews, when asked a variety of questions about PE class, students shared anecdotes about how much fun they have during PE class. When asked to describe their PE class, the majority of students ended with a statement about class being fun. For them, fun meant enjoying themselves in class.

For example, Julia, an MLA student, said PE class is “really, really, really, really fun,” after being asked to describe a memorable experience. These unprompted descriptions happened regularly and were similar to Bill’s, an HA student’s, description of his class: “I think that it can be very enjoyable for people, just, you know, doing all this stuff.” Similarly, when asked about PE in his school, Cesar, an MLA student, said, “I think it’s fun.” In observations, several instructional activities were observed and students having fun was repeatedly witnessed. In a majority of class observations, most of the participants were smiling, laughing, and actively participating in the activity. Padre, an MLA student, explained that he and his friends “...think it’s really fun.” Similarly, Jackie, an HA student, replied, “Most of them feel happy, I guess.” John, an HA student, said, “A lot of people I know like it.” When asked why he said this, he replied, “Because it’s fun.” During informal conversations with the students after class when they were lined up to go back to their classroom, many would shout out “that was so cool,” “that was so fun,” or “you should take gym with us one day, it’s so fun!”

Students have fun in PE class. This theme emerged from the interviews and observations. It is important that we understand that in fourth and fifth grade, regardless of students’ overall attitude toward

PE or gender, all students have fun in PE class and having fun is important.

**Students are excited to go to class.** Students expressed that they are excited to go to PE class. This subtheme is related to the students having fun in class, because they are excited to go to class for that reason. All the participants were excited to go to PE class. Upon entering the gym, the students typically walked in with high energy and the class typically had an excited, conversational buzz. All the students were asked how they felt when they knew they had PE that day. The resounding response was almost exactly the same as Sophie's, an MLA student's, response: "I kind of get a little excited because gym is really fun." When asked how she felt when she knows she has PE class that day, Julia replied, "Everyone's excited and so am I . . . because in gym we get to go outside and play and have fun."

On four occasions, classroom teachers dropped off their classes at the door to the gymnasium and commented to the PE teacher about how excited the class was to come. For example, one teacher said to the PE teacher, "The class has been talking about coming to gym all day." Another said, "Here you go, they couldn't wait to get here." Will, an HA student, said that he "[feels] really great because now I know that because I have [gym] at the end of the day, I know I'll be happy, at, when I go home." The basis for this excitement is, as Will said, ". . . because it's fun."

This subtheme suggests the students were excited to go to class. All students showed feelings of excitement regarding going to class, across gender, grade, and attitude level. This informs us that students came into class with a positive attitude.

**Physical education is their favorite class.** An overwhelming number of students indicated that PE is their favorite class. This fits within the theme of fun, because having fun in class is the main reason that PE is their favorite class. In discussing their other classes in relationship to PE, these 15 students said that PE is their favorite class because it is fun. This was true across gender, grade, and attitude level.

Bob, an MLA student, was the only one out of 16 students who did not choose PE class as his favorite subject. He explained, "I don't really have favorites, I just go with the flow." Although he did not have a favorite class, throughout his interviews Bob repeatedly dis-

cussed how much fun he has in PE and he was observed smiling, laughing, and actively participating in both observed classes.

When asked how she feels about PE compared to her other classes, Jackie replied, "I have to say that physical education is, like, one of the best out of every subject we take." In observations, Jackie was found to be listening intently, participating actively, and often taking leadership roles among her friends during class. When the class was doing an activity related to striking, she often cheered for her friends and even offered advice. Other students supported this claim that PE is their favorite class because it is fun. Padre replied, "Phys. ed. is better . . . gym's the best period of the day except for recess and lunch." When Rebecca, another MLA student, replied that PE is her favorite subject, she was asked why. Her response was because "it is fun, I think it will always be fun." John explained, "It's better [than other classes] 'cause not every game is gonna be a project like social studies. And you only get to do it like once a week or twice a week, but it's definitely better."

Students clearly chose PE as their favorite class in school. This trend was evident in HA and MLA students, fourth and fifth graders, and both genders. The popularity of PE was related to the students thinking that class was fun.

**The teacher influences the fun level.** In the majority of cases, students spoke about the activities the teacher planned, the personality of the teacher, and how strict or fair they perceived their teacher. The teacher was mentioned frequently during interviews when students were asked what influences whether they like or dislike PE. When probed further, students went on to explain how the teacher influences their class and related the teacher with the fun level.

During informal conversations, the teacher was eager to share information about his program and clearly took pride in his teaching. This pride obviously came through to the students. When Cesar was asked about what he feels influenced student attitudes toward PE, he stated,

Probably, in this school, I would say the teacher and the activities. But, in other schools, I would say the activities because I don't know what their teachers are like. All I know is that this teacher here, everybody likes him.

Bob answered the same question by stating that “whether or not the teacher is nice” influences students’ fun levels in PE class. Anna, an MLA student, said that the teacher makes the class fun and described her teacher, similarly to how others described him, in this way:

He’s fun, yeah, he’s really fun and he’s funny. He has a sense of humor and he’s not too strict. He’s very big on, like, safety rules and stuff like that, but at the same time, he makes gym class fun and enjoyable. Like, he makes us laugh and is kind of sarcastic, but he’s also funny. He’s just an enjoyable teacher.

During observations, students seemed to respond positively to the teacher. He joked around frequently with the students, which made them laugh and engaged them. He used humor to gain their attention, and approximately 95% of the students, both boys and girls in fourth and fifth grades, seemed to pay close attention to his instructions. Stephanie, an HA student, said, “He’s fun. He’s active. He likes to do examples [of skill lessons], like in the beginning when we’re starting, he likes to show them what we’re doing and how it’s done. So, he’s fun.” Stephanie’s comment is reflective of other student responses including Jackie’s and Rebecca’s. When questioned about her teacher, Jackie said,

Our gym teacher is really fun. He makes us experience, like, stuff that he thinks that might be fun for us and which they are. Like, it may be fun for me more than other people, but I know they’re really fun to play, our gym teacher, wants it to be fun for us and not like arguing about stuff like ‘our team lost . . .’ or something . . . Well, I think the teacher matters, like, in their attitude. Like, if they have a nice personality, that see, and, like, great attitude, something like that, I think that really matters.

Rebecca, an MLA student, concurred and described her teacher by saying that “he makes everything exciting for all the students in gym . . .” This teacher was very active in giving the students constant feedback, both individually and as a class, during all classes that were observed. While giving feedback, he altered the activity to make it more or less challenging depending on how the class or individual was performing. John stated,

He's nice, because he gets us to do a lot of fun things that I don't think I would be able to do at other schools . . . Because, well, he adds, well, sometimes he adds things to a part of a game, like, he might add one ball, and then he adds another, to make it faster and catch those.

While most students felt that the teacher made the class exciting and fun, one student, Padre, had definite feelings about the teacher, although not as positive as his other classmates'. Class management was not seen as an issue; during most observations, the students were well behaved. Behavior was an apparent issue in only one class. During this class, the teacher stopped the activity, reprimanded everyone, and went over the instructions a second time once he had everyone's attention. This occurred during Padre's class, which might explain his statement about the teacher being angry sometimes. Padre discussed at length that the teacher has a strong influence on whether students like PE class:

I feel that sometimes the teacher gets a little angry for some reason and in some classes, we review way too much. Like we review the same thing day after day, like we're not learning anything new and we're just reviewing.

Teacher influence on the fun level was a theme that once again permeated gender, grade, and attitude level. The teacher having an engaging personality and the teacher being an active participant in the learning process were noted as important to the students. The students clearly connected having fun in class with these characteristics of their teacher.

### **Class Activities Are Important**

All participants stated that the activities done in class are important and influence their attitude toward PE. Class activities were discussed in a variety of ways throughout all of the interviews. This theme was supported by two subthemes: (a) MLA students love problem-solving activities and (b) fitness activities are controversial. In both subthemes, males and females and fourth and fifth graders did not differentiate their opinions. There were, however, clear differences between HA and MLA students. The MLA students spoke

often and positively about problem-solving activities. The HA students seemed to enjoy these activities during observations but hardly spoke about them during interviews. The HA students seemed to enjoy fitness activities more than the MLA students did, and neither HA nor MLA students liked taking the Progressive Aerobic Cardiovascular Endurance Run (PACER) test.

This theme was clearly evident from the final question asked during the first round of interviews: “What do you feel makes a student like or dislike gym?” All the students responded with an answer that included the activities they do in class. Jackie replied, “I think what makes a student like gym is the games we get to play and the fun playing them.” Will responded to what students dislike: “If a student doesn’t like gym it might be because, like because, maybe sometimes, the teacher will have games planned that they don’t really like.” Bob had a similar response: “Well, um, maybe they don’t like the games we would play.” Other students’ responses also related to this theme. Julia answered and discussed a specific game that she and her friends wanted to play and how that influenced their attitude toward PE: “. . . Like, well, um, my friends and I really want to, like, play Capture the Flag and so, like, if we don’t do that, it’s OK as long as we do another game that is fun.” Cesar said, “Most people like physical education because of the activities.”

Class activities and the large influence they have on students were evident through the observations of the classes. Each time the class would come into the gym or go outside onto the field or the blacktop area, they would whisper and look around, either knowing what the activity was or trying to figure it out by the equipment that was set up. There was air of excitement as the teacher explained the activity for that day.

From Padre’s facial expression, it was clear whether he was excited about the activity. During one class, he came into class with no definitive expression. Once he found out they were having a home run derby, his face lit up into a big grin and he high-fived his friend. During the next observation, he came to class with much of the same look on his face. His face dropped when he heard that they would have bowling instruction in class and he scuffed his sneaker into the floor. Later during his interview, he explained,

. . . If the activity is really, really boring and I'm good, I won't like it, but if the activity is really fun even if I'm the worst at it in the class, I still love it. I just care about the activity . . . Like, we do bowling in four lanes and we do speed bowling and then we get to the next lane, same exact thing. Like, [the PE teacher] thinks that most kids will like it, but it's not very fun.

All of the students across grade, gender, and attitude level indicated that what they do in class influences their experience. This theme centered around the idea that if the students like or dislike the activity, it will have a strong influence on whether they have a positive attitude toward class. These activities were then delineated further into team problem-solving and fitness activities.

**Moderate to low attitude students love team problem solving.** Problem-solving activities are popular among MLA students, which is directly related to the overarching theme that class activities are important. MLA students repeatedly discussed team problem-solving activities, the majority of whom spoke about it positively. While only 2 out of 8 HA students spoke about team problem-solving activities, all eight showed that they enjoyed these activities during observations.

Team problem-solving activities incorporated physical activity with cooperative challenges. At this school, the favorite seemed to be Volcano Island, with Subway a close second. When asked their favorite experience in PE and what they like most, the MLA students constantly mentioned team problem-solving activities. During observations, the HA and MLA students were laughing, smiling, and enjoying team problem-solving activities. The MLA students, however, were the ones who spoke about it during interviews.

Volcano Island was observed and was a team-building activity in which the class works together to get everyone from one place to the other (i.e., mat to mat) using various pieces of equipment such as jump ropes, pool noodles, and scooters while working around obstacles. The challenge is changed slightly each year. Jackie explained the activity Subway:

We play—like once [our teacher] brought an [activity] called Subway and it's really fun because you have to bring everyone out of—like it's kind of like a subway so the train has to carry

everyone and then put them back in their, like, where they want to go and stuff.

The researcher then clarified with Jackie that this activity is one in which everyone has to work as a team to transport their classmates around the gymnasium using various pieces of equipment. Other students had similar responses. Rebecca was asked, “Do you have a favorite activity or favorite thing you do?” She replied, “I like when we play Volcano Island and that’s really fun to play.” After further probing, she said, “Yeah, everybody seems to like Volcano Island . . . because it’s just, like,—like, I like the competition thing also and I like competitions.” In an interview, Anna explained,

Like, for example, Volcano Island, it’s not really—we don’t really exercise and more it’s just like fun for us to play . . . Well, because it involves a lot of like humor, but it’s like one of those games where you’re timed and it’s like you’re freaking out at one point because ‘Oh, I got stuck and I’m going to explode’ . . . Like it also involves a lot of skill too and we don’t play it often so it’s kind of almost like a thrill when play it. Sometimes, you’ll walk, we see like the younger grades playing it and we have to play something different and I’m like ‘I want to play Volcano Island’ . . .

Cesar said, “And everybody mostly likes the game Volcano Island . . . Yes [it’s my favorite]. Like, you have a lot of this strategy involved and we played it during the school picnic.” The researcher was invited to attend the school’s picnic. Informal observations were completed, and Volcano Island was one of the stations that each class attended. Students would run over to that station when they realized that Volcano Island was next. It was evident how enthusiastic both MLA and HA students were for this type of activity.

Clearly, MLA and HA students enjoy team problem-solving activities. It is interesting that only MLA students spoke about these types of activities during the interview. Student perceptions about these team problem-solving activities and the frequency with which they were discussed during interviews fit well with the overarching theme that class activities are important.

**Fitness activities are controversial.** Doing fitness activities during PE class was a controversial topic among students, which also

relates to the concept that class activities influence student perceptions. Nearly all of the HA and MLA students had a strong opinion about fitness activities. The HA students had positive feelings about fitness activities. The only aspect the HA students spoke about negatively was the PACER test. The PACER test measures cardiovascular endurance in students from kindergarten to college. Only a few HA students spoke positively about the PACER test. All of MLA students did not say much about fitness activities but spoke negatively about fitness testing, especially the PACER test.

In this PE program, each time students have class they do fitness activities. This was witnessed during the observations and explained by the students when asked to describe a typical day in their PE class. Rebecca described her class: “We usually, like-like, I said, like warm-ups. We do, like, jumping jacks. We jog. We do push-ups, curl-ups, and all these other things.” In observations of each class, students came and immediately engaged in fitness activities to warm up. During most observations, students went right into stations, which included stationary bikes, a rock climbing wall, a stretching or yoga station, an upper body strength station, and a jump rope station. These stations acted as the class warm-up. The teacher noted that the students do Fitnessgram physical fitness testing twice a year, once in the beginning and once toward the end of the school year. The students are given personal printouts with their fitness levels each time they do the Fitnessgram. These printouts act as a guide from which students can work on their fitness and test preparation all year.

The students participated in these activities during the warm-ups, chatting with their friends or concentrating on the task at hand. It was challenging to determine from the observations whether the students were enjoying these activities, because they were routine and did not elicit much of a response. The interviews, however, gave insight into how students feel about fitness activities. HA students spoke highly about exercising, the fitness activities done in class, and fitness testing, whereas MLA students did not talk about exercise or fitness activities much at all but spoke negatively about the fitness testing, especially the PACER test. Many of the MLA students complained that the PACER test is boring and that it makes them tired.

During three observations, the students were learning how to run at a pace. This activity consisted of students taking turns run-

ning back and forth from cone to cone in teams. In an informal conversation with the teacher, he said that they were doing this to practice for the PACER test and learn how to run long distances. The MLA students, such as George T., were clearly uncomfortable. He was observed with a look of discomfort on his face as well as hesitation to start each time it was his turn. He was heard complaining to his friends about how much he hated the activity. He asked, “Why do we have to do this? It’s so boring” and making comments such as “I hope we don’t do this the whole class.” His friends shrugged in response. Other students had similar responses. For example, Julia described the PACER test as her least favorite activity:

I really don’t like PACER, even though I do it very well. I don’t like it . . . Well, I get tired out and then when everybody gets tired out, we’re like mad that they didn’t get just, like, the point 75, which is the highest.

Anna also said that it was her least favorite activity “because you just get, like, out of breath and it’s kind of boring, back and forth, although I don’t really run a lot. Yeah, I just don’t like it.” Cesar agreed,

Well, I don’t like when we have the tests and we have to do pull-ups and we have to do an amount of curl-ups or push-ups. And I hate PACER because you just keep going and somehow I think everybody just makes it a contest.

He was then asked, “So, do you like the Fitnessgram and all that stuff?” Cesar replied, “No, no.” George Washington, an HA student, explained, “. . . [PACER is] really boring because all you really do is jogging.” Star, an HA student, also said, “PACER and things like that are really boring.”

When the HA students spoke about other fitness activities, it was in a positive way. When asked about good experiences in class, Will explained, “Well, when I did PACER I got the highest [laps] you can get and like sit-ups, I did the most in the class.” It was clear that Will was proud of his running ability and seemed to enjoy this activity. This was evident by his enthusiasm throughout the class. John also explained that his favorite experience in class was getting “all 75 [laps] that you can get on PACER.” He said it made him feel “awesome.” Bill explained that the “exercise is what makes it fun.”

During the observation of the PACER practice activity, John was seen jogging easily from cone to cone, smiling, and high-fiving his friends at the finish. During the same activity, Will got a lot of attention from his friends and compliments on how fast he can run, which also garnered smiles and high fives from Will.

The class activities are important in student perceptions regarding what influences their attitudes. Within class activities, fitness activities were noted throughout the interviews and observations. Gender and grade level seemed to have little effect. The MLA and HA students seemed to differ in their opinions. The HA students tended to enjoy fitness activities more than the MLA students did, and neither group seemed to have positive feelings toward the PACER test.

## Discussion

Fun in PE was found throughout the study to influence student perceptions toward PE. This was not surprising given the research on the importance of fun in PE. Fun has been suggested to be a pervasive construct in PE (Garn & Cothran, 2006). Research has also suggested that students rate fun or enjoyment as one of their top goals for PE class (Cothran & Ennis, 1998; Garn & Cothran, 2006; O'Reilly, Tompkins, & Gallant, 2001; Supaporn & Griffin, 1998). The results of this study suggest that having fun is a key to students enjoying PE, and upper elementary school students clearly equate fun with PE class. It appears that if students do not enjoy learning in PE, this will likely influence their attitude toward PE and, ultimately, physical activity since students equate experiences in PE with physical activity outside of school (Carlson, 1995; Ennis, 1996; Portman, 1995; Robinson, 1990; Solmon & Lee, 1996). Therefore, it is important that students have fun in PE class, because this may influence their perceptions and beliefs.

The teacher was another factor that was found to influence student attitudes toward PE. Upper elementary school students related their teacher to influencing how much fun they have in class. This aligns with the research on student attitude that has found the teacher, within the constructs of perceived usefulness and enjoyment, influences attitude (Luke & Sinclair, 1991; Montalvo & Silverman, 2008; Subramaniam & Silverman, 2000, 2007). Even more specific to this finding is the research that suggests the teacher can help create negative attitudes (Luke & Sinclair, 1991). Conversely, results of this

study suggest that the teacher can also create an atmosphere of fun, which can help create positive attitudes.

Team problem-solving activities are important for MLA students. Research on student attitudes for upper elementary school students through middle and high school students has noted that the curriculum influences student attitude (Montalvo & Silverman, 2008; Subramaniam & Silverman, 2000). Students' perceived usefulness and their enjoyment of the curriculum have been suggested to influence student attitude. While student skill level may be the obvious conclusion why MLA students like team problem-solving activities, it is not as obvious as it seems. During observations, student skill level varied between HA and MLA students, and students' perceptions of their own skill level were skewed. All but one of the 16 students interviewed said that they were high skilled in class, when in reality the skill level was varied. This finding that team problem-solving activities are popular among MLA students creates a basis for future research on the Project Adventure, or similar, curriculum and its influence on student attitudes and perceptions.

Exercise and fitness activities were frequently referenced in conjunction with fitness testing, preparation for fitness testing, and the PACER test, and HA students were vocal about their enjoyment of exercise, while MLA students were vocal about their dislike of exercise. The PACER test was strongly disliked by both HA and MLA students. Hopple and Graham (1995) suggested that these types of aerobic fitness testing activities may be detrimental, and the students in this study confirmed that finding. It is clear, in this study, that MLA students do not enjoy fitness activities for which they do not feel prepared and do not experience success. This is an important finding, because research has suggested that if used inappropriately, fitness testing can be detrimental to physical activity levels (Corbin, Pangrazi, & Welk, 1995; Keating, 2003; McKenzie & Kahan, 2004). Many have noted that fitness testing is only helpful to students when done appropriately (Cale, Harris, & Chen, 2007; Corbin et al., 1995; Montalvo & Silverman, 2008). These student perceptions toward fitness activities can help inform the future use of fitness activities and testing.

During the data analysis process, three girls, all in fifth grade, mentioned sweating was an issue. Here, however, there was not

enough data to substantiate a finding. It might be interesting for future research to pursue sweating as a gender-related concern for developing adolescents in the upper elementary school grades. This finding warrants further investigation and could add insight into why, starting in sixth grade, females dislike PE more than males do (Subramaniam & Silverman, 2007).

This study continues in a line of research in PE that suggests a great deal of information can be learned from the study of student perceptions. In this study, upper elementary school students diagnosed issues, both positive and negative, by sharing their perceptions. In this instance, a program that has been well thought of still provided student perceptions that suggest some well-used techniques and practices may not yield the skill, fitness, or attitudes that teachers suggest they do. These perceptions can influence whether students choose to participate in learning (Pajares, 1992; Zimbardo & Leippe, 1991), making understanding them invaluable. Because this study and other research in PE (Bernstein et al., 2011; Carlson, 1995; Graham, 1995; Hopple & Graham, 1995; Portman, 1995) suggest the importance of student perceptions in informing what we know about the teaching and learning of PE, these findings can help inform future teaching of motor skills and fitness and how to foster positive attitudes toward PE. If we want students to learn what is intended, we must understand how their experiences in PE shape what they think and feel and how it influences their future physical activity.

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