ATTITUDES OF CHARTER HIGH SCHOOL STUDENTS
TOWARD PHYSICAL EDUCATION

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to the Faculty of
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In Partial Fulfillment
of the Requirements for the Degree
Masters of Arts
in
Kinesiology

by
Jenna Louise Salz 2011
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DEDICATION

This thesis is dedicated to my parents who have stood by my side since day one and will continue to support me for many years.

Dad, your ability to question my decisions has made me the person I am today. Always looking at both sides of a situation and helping me choose the right path has brought me much success and happiness. You always have a logical reasoning that I may not see at first but always seems to be the right answer in the end! Thank-you for your encouragement and support through all my schooling. I love you!

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ABSTRACT

ATTITUDES OF CHARTER HIGH SCHOOL STUDENTS
TOWARD PHYSICAL EDUCATION

by

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Master of Arts in Kinesiology
California State University, Chico

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The purpose of this study was to examine the attitudes of charter high school student’s toward physical education. Parental consent forms were returned by ninety–five percent of students. This study involved twenty 9th and 10th grade students from a charter high school in an off campus physical education program. Attitudes were determined using a survey and focus group interviews. Fitness testing was used to analyze student performance. One student was unable to participate in fitness testing due to an injury. One main research question and five sub-questions guided this study. Questions explored student attitudes toward physical education, choice, fitness testing and meaning of physical education. All students completed a validated 20-item attitude survey. Participants completed fitness testing in five areas. Four males and four females randomly selected participated in focus group interviews after completing the survey. Each interview was audio recorded and transcribed for analysis. An inductive analysis
approach was used to identify themes; Four themes emerged: 1) “We don’t have to do a Certain Thing!” 2) To Like or Not to Like 3) Boring, Old Fitness Testing and 4) Overwhelmed by Multiple Teachers. The results showed that the students in this study had a positive attitude toward physical education. Students found choice in physical education to be positive experience. Students expressed dissatisfaction with rule alterations in sports and games, although they understood the purpose. Although participants had high scores on fitness testing, they did not enjoy it. Participants found teachers to be enthusiastic; however, the multiple undergraduate teachers were less enjoyable for students. Future research is needed to examine charter high school students in various locations and programs to identify attitudes toward physical education.
CHAPTER I

INTRODUCTION

To meet the various learning goals of students, educators use a variety of learning tasks and instructional practices. An eclectic approach to teaching is practiced by some teachers; however, Snider and Roehl (2007) argue, “a prescriptive, but well-designed curriculum provides the best opportunity for student learning” (p. 881). From a constructivist approach to teaching, learners engage in activities that are meaningful, explore challenges, participate in interactive group work, and invest themselves in the learning process (Snider & Roehl, 2007). Educators have the ability and responsibility to implement curriculum that meets the needs of their students. Meeting the needs of students has led to an innovative and creative educational movement toward charter schools.

Over the last decade charter schools have made an impact in modern education. With the first charter school opening in 1992, in Minnesota, the number has grown to nearly 3,000 schools in 37 states and the District of Colombia, providing services to 680,000 students. Determining whether charter schools were performing well has been a concern of educational researchers. A reason is that charter schools do not all follow the same approach, making it hard to assess and compared to traditional public schools. There have been mixed results of student performance among charter schools (Buddin & Zimmer, 2005).
An early study by Solmon, Paark and Garcia (2001) found that charter school students out performed traditional public school students, although performance during the first and second year of the charter school, students yielded lower student performance in several academic subjects. Alternatively, studies have shown charter school students to perform at lower levels than traditional public schools (Bifulco, Ladd & Ross 2009; Eberts, Hollenbeck & Upjohn, 2002; Zimmer et al., 2003). It is unclear why scores are inconsistent, but may be explained by the fact that charter school types and laws are different across the states (Buddin & Zimmer, 2005). Often a challenge in public schools, charter schools experience difficulties in budgeting and facilities to provide students with enough physical activity and to adequately educate students (Hurst, 2004).

With the continued charter school movement over the next decade, it is important to study the impact of charter schools on school physical education. The National Association of Sport and Physical Education (NASPE) developed standards for learning so that physical education programs “develop physically-educated individuals who have the knowledge, skills, and confidence to enjoy a lifetime of healthful physical activity” (NASPE, 2004, pg 11). In the lifelong learning process students build positive attitudes toward physical activity by finding activities that are motivating and challenging. Once attitudes have been established it is important to make solid activity choices based on fitness level, interest, social and the perceived benefits of the activity (Corbin & Lindsey, 2007). Students’ attitudes, interests and activity choices can offer insight to help physical education teachers design curriculum and engage students in activities they enjoy (Fleming, Mitchell, Gorecki, & Coleman, 1999; Greenwood &
Stillwell, 2001; Kovar, Ermle, Mehrhof, & Napper-Owen, 2001) and those that enhance the chances of producing life-long physical activity. Students who have positive attitudes about physical education content are more apt to give a strong effort, attend to instruction and achieve success, compared to students with negative attitudes who may be taught a repetitive or meaningless curriculum (Solmon, 2003).

Physical education may help academic performance by providing more blood to the brain, increasing moods, enhancing mental alertness and improving self-esteem (Castelli, Hillman, Buck & Erwin, 2007; Chomitz, Slining, McGowan, Mitchell, Dawson & Hacker, 2009; Hills, 1998). Shepard (1997) concluded that physical education not only maintains academic performance, but has the ability to increase academic success, despite reduced time spent in other subjects.

Quality physical education promotes lifetime wellness, teaches self-management and motor skills, and can help minimize the chances of obesity. Without intervention at a young age the chances of obesity, among youth and adults, is more likely to increase, thus adding to the current epidemic (Le Masurier & Corbin, 2006). Obesity rates have tripled in the last two decades; adolescents and youth between the ages of 2 and 17 have yielded an obesity rate of 17% (CDC, 2008; Ogden, Carroll, Curtin, McDowell, Tabak, & Flegel, 2006) based on body mass index using height and weight. It is estimated that 80% of adolescents who are obese between the ages of 10-15 will be obese adults by age 25 (Ogden et al., 2006). When youth are provided with quality daily physical education, schools provide the opportunity to be active during the day and thus disrupt the cycle of a sedentary lifestyle.
NASPE recommends 225 minutes per week for middle and high school students and 150 minutes per week for elementary school students (NASPE, 2010). On the other hand, the California Department of Education (CDE, 2005) adopted the physical education minute requirements to include 200 minutes every 10 school days for grades 1-6 and students in grades 7 through 12 students are required 400 minutes every 10 days. These reported minutes are not to be filled with recess, lunch and “free-time” activities, but with quality physical education. However, these mandates are rarely enforced.

Whitehead (1993) stated “Common sense tells us that participation in many sports and physical activities can lead to feelings of autonomy and competence and may produce joy, excitement, thrills and other satisfying emotions” (p. 2). Students often have different views of enjoyable curriculum and learning environments. Subramaniam and Silverman (2002) stated “enjoyment was perceived as an important element to both high attitude and low attitude students in physical education” (p. 79). Those with high attitudes are able to take responsibility for their experiences to see that there is enjoyment in each activity. Students with low attitudes feel that it is the teacher and curriculum that make the situation unenjoyable (Subramaniam & Silverman, 2002).

Educators can provide students with meaningful experiences which students are highly motivated by offering activities that students find interesting and they enjoy. Engaging students in activities with varieties and challenges allows students to work at their own skill level while teachers are providing other students with personal feedback. Teachers who provide activities with immediate feedback guide students in subsequent responses (Brophy, 1987). Derived from Mosston and Ashworth (2001), Himberg, Hutchinson and Roussell (2003) have identified six teaching styles in physical education
with focus on inclusion in each teaching style, rather than identifying inclusion as its own sub-category. Teaching activity in physical education may be taught using several of the following teaching styles: direct teaching, teacher feedback, self-feedback, partner feedback, convergent discovery and divergent discovery. Dependent upon the learning objective, a teacher may choose a specific teaching style. Convergent and divergent discovery allow students to explore the intended task with one or multiple answers respectively. By providing students with tasks employing multiply answers, students are able to make choices about the activity and the way in which they will solve the task. By implementing choice into curriculum students are placed as the focus in the learning process (Pagnano & Griffin, 2001). Teachers who provide autonomy generate internalization among students and promote student success, progress and initiative decision making (Boiche, Sarrazin, Pelletier, Grouzet & Chanal, 2008).

Supported by research on the learning styles of college women, Vaughn, Battle, Taylor and Dearman, (2009) discovered that one’s ability to learn may impact how persons relate and interact with others. “Being aware of preferred learning styles may also increase the likelihood that students become more successful in making decisions inside and outside the academic environment because they can recognize their personal responsibility and contribution to situations more clearly” (p. 731). By providing choices in physical education classes, educators are able to meet the preferences of students and may lead students to higher interest and personal investment in the activity (Stillwell &Willgoose, 1997).
This study was designed to examine charter high school students’ attitudes in physical education. The results of this study may help researchers further understand how physical education programs impact student experiences and attitudes.

Research Question

What are charter high school student’s attitudes toward physical education?

Purpose of the Study

The purpose of this study was to examine attitudes of charter high school student’s toward physical education. This study was driven by a main research question and five sub questions:

1. What are charter high school student’s attitudes toward physical education?
   a. What makes physical education meaningful?
   b. What are student’s favorite aspects of the program?
   c. What are student’s least favorite aspects of the program?
   d. Is choice important for students? If so, why?
   e. How do students perceive fitness testing?

Assumptions

It is assumed during the focus group interviews and survey that students answered honestly, to the best of their ability, and without peer influences. During fitness testing it is assumed students gave their best effort on all tests. It is assumed that students were motivated to participate in this study and were not under the impression that they
would receive a higher grade. It was also assumed that students understood questions on the survey and during the interviews.

Delimitations

The delimitations of this study are as follow:

1. Data were collected in the Spring of 2011.
2. The study was delimited to students participating in the Rockport Charter School physical education program.
3. The study was delimited to 9th and 10th grade students.
4. The study was delimited to students who returned parental consent forms.
5. The study was delimited to a convenient sample.
6. The researcher is one of the teachers of the program.
7. A second graduate student is also a teacher in the program.
8. Students attended class twice a week for 100 minutes per session.
9. Students have limited choices of activity during class.
10. Students have chosen to be a part of the off campus program.

Limitations

1. Teachers do not see students other than during class, due to the off campus location.
2. Previous physical education experiences could alter or impact students’ current attitudes.
3. The program takes place on a college campus and the pedagogy lab is unlike a typical high school gym and playing field.
Theoretical Framework

In the works of Fishbein and Ajzen (1975) attitude is defined as “a learned predisposition to respond in a consistently favorable or unfavorable manner with respect to a given object” (p.6). The Theory of Reasoned Action (Fishbein & Azjen, 1975) was developed to explain the relationship between attitude and behavior. Attitudes are not the only predictor of behaviors, but a part of the process that “leads to a set of intentions that indicate a certain amount of affect toward the object in question” (p.15).

Beliefs are the building blocks of the framework, setting a person up to determine their attitudes, intentions and behaviors. Beliefs toward an object that are favorable lead to an attitude that is positive; thus when a belief is unfavorable the attitude toward an object tends to be negative. Attitudes toward an object are related to ones intentions to perform certain behaviors toward the specific object. Following ones intentions come the behavior; behaviors should be performed with respect to a specific object.

There are many theories of how attitudes are created or changed, Fishbein and Azjen (1975) have included: cognitive dissonance theory, attribution theory, learning theories, expectancy-value theories, and consistency theories. The attribution theory is most closely related to the importance of attitude in this study. The Theory of Attribution examines the formation and change of beliefs. Internal and external attributions play a role in one’s behaviors. As the person is also an observer in this theory, the attribution theory also allows for beliefs about one’s self.
Significance of Study

Research shows that physical education in school can increase physical activity levels during youth and later in life (Trudeau, Laurencelle, Tremblay, Rajic & Shephard, 1999). Consequently, physical education not only contributes to a healthy body, but a healthy mind. Also, research indicates that physical education has the ability to impact self-esteem (Fox, 2000), well-being (Dishman, 1995), and reduce stress, depression and anxiety (Hassmen, Koivula, & Uutela, 2000). According to Bailey (2006), “There is no reason to believe that simply supporting participation in physical education and sport will necessarily bring about positive changes to children or to their communities. The actions and interactions of teachers and coaches largely determine whether or not children and young people experience these positive aspects of physical education and sport and whether or not they realize its great potential” (p. 399).

Increasing student competence has become a major goal in the educational reform to increase student motivation in all school related activities. Teachers often use point systems, stickers, tokens and prizes to motivate students to participate and provide effort. However it is important for educators to convey to students the importance of intrinsic motivation (Kohn, 1993; Lee, Fredenburg, Belcher, & Cleveland, 1999).

Results in this study may help further explore various physical education programs and give researchers possible insight to charter school physical education and what students are doing to complete high school requirements. There is little research on charter school physical education and it is important to the development of the new charter school reform that physical education be taken into consideration when discussing
the strengths and weaknesses of charter schools. Although this program is out of the
norm for physical education, it may give insight to further research on charter schools.

Research Projections

There are three main research projections in this study. First, students will find
physical education as a fun, enjoyable, and meaningful experience. Secondly, students
will find that having choices in physical education motivates increased effort and
enjoyment. Lastly, students will likely perceive Fitnessgram testing hard and un-
enjoyable, but a good way to measure fitness improvement.

Definition of Terms

The following terms will be used throughout this study. Definitions here
follow to ensure that terms are informative and used with consistency.

1. **Attitude**: “…the word attitude is used in both positive and negative ways to
express a state of mind, feeling or disposition of an individual” (Subramaniam &

2. **Charter School**: “Charter schools are nonsectarian public schools of choice
that operate with freedom from many of the regulations that apply to traditional public
schools” (WestEd, 2000).

3. **Choice**: (n.) “power of choosing: option” (Merriam Webster Dictionary).

4. **Competition**: “… a process in which the comparison of an individual’s
performance is made with some standard in the presence of at least one other person who
is aware of the criteria for comparison and can evaluate a comparison process” (Martens, 1978, p.14).

5. **Focus Group Interview**: “The purpose of a focus group interview is to listen and gather information. It is a way to better understand how people feel or think about an issue, product or service.” (Krueger & Casey, 2000, p. 4).

6. **Physical Education**: “Physical education is based on a sequence of learning. These formalized courses are taught by professionals and focus on the skills and knowledge needed to establish and sustain an active lifestyle. Physical education classes focus on physical activity – running, dancing and other movement but physical education also includes health, nutrition, social responsibility, and the value of fitness throughout one’s life” (NASPE, 2010, p. 3).
CHAPTER II

REVIEW OF LITERATURE

The review of literature is divided into four main sections. The first section will capture previous literature pertaining to students' attitudes toward physical education in middle and high school. The second section explores students' motivations to participate in physical education. The third section encompasses student choices in physical education. The final chapter will present information about the up and coming charter school movement.

Student Attitudes Toward Physical Education

There have been many studies conducted assessing students' attitudes about physical education. The following studies represent aspects of the literature that cover multicultural perspectives, fitness based programs, fitness development, skill development, cognitive development, affective development and social development, standards based curriculum and sport activities.

Stewart and Green (1991) examined the attitudes of junior high and high school students in physical education. A total of 1,049 males and 1,081 females participated in the study from two middle and high schools in the Midwest. Students completed a 66-item survey created by Edgington (1968) representing attitudes toward physical education in fitness development, skill development, cognitive development, affective development and social development. Students were given four Likert Scale (1-4) response options: strongly agree, agree, disagree and strongly disagree. Many similar
studies allow students to respond with a neutral feeling, however, this was eliminated to force students to make a positive or negative choice.

Results indicated that senior high boys and girls and junior high boys ranked fitness as the most important area in physical education, while junior high girls reported fitness and social development to be equally as important. Skill development was reported to complete the top three areas of development most important to students. Overall cognitive development was reported to be of least importance of the five areas. Survey results were consistent with other research completed on school aged children’s attitudes. Although girls reported fitness, skill and social development important to physical education, they did not report enjoyment in physical education, confirmed through low scores in the affective domain.

An attitudinal study by Tannehill and Zakrajsen (1993) explored the attitudes of middle and high school students toward physical education from a multicultural perspective. Teachers volunteered to survey students in their classes, a total of 366 (286 girls) participated in this study. Students ranged from 11 to 19 years old in grades 6 through 12. Over half (52%) of students reported being involved in competitive sports outside of school, while 46% reported being involved in school athletics. Participants were given a survey focusing on “students’ attitudes toward the goals of physical education, likes/dislikes about physical education, the importance of physical education to their overall education, values developed through physical education and positive/negative experiences in physical education.” (p. 79). Over 50% of students felt all areas should be covered except, dance skills. Of students opposing the need for dance skills, Asian American students (71%) and boys (72%) felt this was not necessary. Asian
Americans (72%) and Hispanic Americans (70%) felt that fitness was the most important in physical education; African American and Anglo Americans reported fitness to be the most important (57%). When reporting the most important reason for liking physical education, Anglo-Americans (75%) reported “being with friends”, while only 57% of Asian American youth stated this to be the most motivating factor, finally 73% of Hispanic Americans reported “becoming more fit” as their personal motivator for enjoying physical education.

Rikard and Banville (2006) investigated the attitudes of high school students toward physical education curriculum regarding fitness and sport activities; as well as student attitudes toward the curriculum effectiveness contributing to their fitness and skill levels. Students (n=515) were drawn from 17 physical education classes of 9th and 10th graders to include 267 males and 246 females. Questionnaires were distributed to all participants and 159 student attitudes were explored in focus groups of 6-10. Questionnaires focused on acquired knowledge, skill and fitness status, and time spent in the activities during physical education classes. During focus group interviews, students were asked about activities they would like to see in cooperated into their future physical education program.

The questionnaire was designed to allow for a Likert Scale answer and open ended questions pertaining to their feelings about time spent on sport activities and reasoning for their feelings. Many of the students (73%) reported liking sport activities and the top three reasons were as follows: fun (19%), liking sports in general (10%) and liking the activity offered (9%). Students were given the opportunity to comment and provide suggestions about the curriculum; two themes emerged; the need for variety in
sport activities and fitness portions of the curriculum, and the level of challenge for activities offered. Many students went on to suggest activities which they do not normally participate in (i.e., rock climbing, yoga, inline skating, and roller hockey).

When asked if students participated in physical activity outside of school when introduced to it in your physical education class 82% of students reported that they did not. Of students that did participate in outside activities, which were introduced during physical education, students were more likely to participate in individual or dual activities. Students also reported they felt more confident with equipment that they were taught to use for fitness purposes such as weights and exercise balls.

Bibik, Goodwin and Omega-Smith (2007) explored a standards based curriculum and students attitudes toward physical education in Delaware. Students in 9th-12th grades (n=223) were given a questionnaire containing 31 questions derived from various surveys and literature to determine students likes, dislikes and importance of physical education (questions were both open ended and Likert scale questions). A questionnaire about student demographics and importance of other subjects was also administered. The final section of the four part questionnaire had students indicate the most and least important activities in their physical education class; questions included 44 team and individual sports, aquatics, fitness, dance, self-defense and outdoor recreation.

Results indicated 31% of students mentioned specific sports when asked what they liked most about physical education, while 18% stated that running was their least favorite activity. Students were asked to provide suggestions for curriculum and results revealed that 45% of students wanted more sports and games while 55% of students wanted more personal choice, fitness and strength activities. The reports of class
dynamics showed 74% of students preferred a co-ed setting, albeit reasoning was “to look at the girls/boys”. Students who enjoyed physical education were more likely to enjoy school in general and thought that physical education was important to their day and it should be offered more frequently. Interestingly, a majority of students (58%) stated they would like to have physical education 5 days a week, on the contrary 5% of students stated they would like have physical education only once a week. As important, students who participated in negative health related behaviors (drinking, smoking, and drugs) were less likely to enjoy physical education.

A study of middle school students (Subramaniam & Silverman, 2007) was conducted to assess attitudes toward physical education. Students (n=995) from three Midwest middle schools in 6th, 7th and 8th grade participated in an attitudinal survey. A 20 item attitude survey was created by both authors and validated for content validity and reliability. A Likert scale was used on a five point basis ranging from 1 (strongly disagree) to 5 (strongly agree). During the survey students were reminded their answers would be kept anonymous and their grade would not be compromised for negative answers.

Across all three grades, students had a relatively positive attitude toward physical education however, as students got older their attitudes declined. Once students reached 8th grade students were bored with activities and the repetition of the previous year’s activities contributed to a negative attitude toward physical education. As students develop at different ages the decline in attitude could result from the difference of perceptions of enjoyment with age. Enjoyment in physical education is often driven by curriculum that allow students to increase physical demands (in various ways), and give
them the opportunity to cognitively develop strategies to games, such as offense and defense design. The authors concluded that although student attitudes toward physical education declined with age, it is important for educators to keep curriculum enjoyable with a variety of activities and new styles of learning to appeal to all students.

A graduate thesis (Schwyzer, 2007) analyzed attitudes and perceptions of at-risk high school student’s toward physical education and physical activity. The study included 101 students in 9th through 12th grade. Students completed a 26 questionnaire involving 23 Likert Scale questions and three open ended questions to assess student attitudes toward physical education and physical activity. Following the questionnaire, 16 students participated in a focus group interview to further explore attitudes and perceptions.

Results from questionnaires and focus group interviews indicated students had positives attitudes about physical education and physical activity. Students reported health and fitness were important and they generally liked physical education. Students perceived that their parents influenced their attitudes and perceptions toward physical education and physical education. It was reported that students’ parents did not participate regularly in physical activity and remained a questionable role model for their children.

Subramaniam and Silverman (2000) developed an instrument “to assess student attitude toward physical education” p. 31. A four phase process of reliability and validity was completed to finalize the study. During the first phase, two questionnaires were implemented, using open ended questions to explore likes, dislikes, beliefs and feelings about physical education. A second elicitation questionnaire was developed to
expose reasoning behind enjoyable experiences, and perceived usefulness of physical education in students’ current classes.

During phase two, the elicitation questionnaires contributed to the emergent of 30 questions using a five point Likert-type scale. Questions were reviewed by teacher educators and physical education teachers. Students (n=33) in a summer sports fitness camp participated in the preliminary study by completing the survey. Phase three explored content validity. Thirty five experts in sport pedagogy placed each question into one of the following categories: “(a) enjoyment teacher (ET), (b) enjoyment curriculum (EC), (c) enjoyment peer (EP), (d) usefulness curriculum (UC), and (e) usefulness peer (EP)” (Subramaniam & Silverman, 2000 p. 34).

The final phase of the validation process involved administering the survey to middle school students (n=995) in physical education classes. Responses were collected and data were analyzed to determine reliability and validity. Internal consistency was used to determine reliability using Cronbach’s alpha (Cronbach, 1951). McDonald’s (1999) omega coefficient was used to determine validity. The alpha and McDonald’s omega reliability scores supported internal validity of the instrument. The peer sub factor was omitted in the final instrument as it was considered uninformative about students’ attitudes toward physical education teachers and curriculum. The final instrument consisted of 20 questions used in the assistance of understanding student attitudes toward physical education.
Student Motivation in Physical Education

Motivating students learn is often done a variety of ways: stickers, stars, certificates, awards, trophies and the coveted, grades (Kohn, 1993). Student motivation can be positively affected by the climate in which a student is learning in and success is a defining factor for enjoyment in physical education. Students that are unsuccessful in activities often find physical education to be boring and those activities should be eliminated from the curriculum (Portman, 2003).

Social factors, psychological mediations, motivational types and consequences in students aged 14-16 were examined by Ntoumanis (2001). A total of 428 participants from two schools in Northwest England were observed in this study. Various tools were used to assess cooperative learning, improvement, social factors, perceived competence, autonomy, relatedness, intrinsic motivation, external regulation, and types of motivation, and boredom, effort, and future intention to exercise. Data were compiled from all surveys and questionnaires. Mean scores showed that students had an ample opportunity for cooperative learning and individual improvement. On the contrary, students felt they did not have enough choices in activities. This was partially due to the fact that the physical education curriculum in England was mandated, inflexible and allowed for minimal teacher creativity.

Previous research grouped motivation types into a self-determination index score. This study looked at all scores individually and made the following conclusions. The three social factors were connected with the three psychological factors. Cooperation and relatedness, improvement and competence, choice and autonomy, were all reported to have strong connections. In agreement with previous studies, this
particular study showed that students with lower levels of perceived confidence experienced lower levels of motivation. Findings also concluded that students with positive experiences in physical education had higher intentions to stay physically active after their school years, which was only influenced by intrinsic motivation.

In Wallhead and Ntoumanis’ (2004) research, student enjoyment, perceived effort and perceived competence were investigated using two different teaching methods, the Sport Education Model and a direct teaching approach during a games-based activity unit. Students in a high school north of England were included in the study of 51 boys with an average 14 years of age. Students were given a baseline questionnaire prior to the program and were told the study “would look for new ways to teach PE” (p. 10).

Students participated in their assigned class for an eight week basketball unit. Students in the Sport Education Model group signed contracts agreeing to a role of responsibility during the unit as they would be making choices that would affect their experience and others in the class. Students participating in the traditional program were not given any choices during the unit. At the conclusion of the intervention, students were given the same questionnaire to identify changes in the student enjoyment, perceived effort and perceived competence from pre to post intervention. Results showed students who participated in the Sport Education intervention reported to have higher effort and perceived competence, compared to those taking part in the traditional model. Students in the Sport Education group also reported higher levels of enjoyment and effort, and although statistically insignificant, mean scores were higher for perceived competence.

Situational intrinsic motivation was recently studied by Moreno, González-Cutre, Martin-Albo and Cervelló (2010) to look at perceived competence in executing a
task and performance. Four items were used during data collection among 363 participants between the ages of 12 and 16. The Habitual Physical Activity Questionnaire was used to measure routine physical activity levels. The Physical Self-Perception Profile was used for sport competence. A Lateral Movement Test, KTK, was used to assess body coordination in children. Finally the Situational Intrinsic Motivation Scale was used to determine participants’ intrinsic motivation.

Three groups were created; (1) experimental incremental, which was informed that individuals can increase performance of a skill or task through practice and experience, (2) experimental entity, expressing that one is born with ability and it may not be improved upon, (3) A control group, that was told how to do the activity and nothing else. Data suggest that the incremental group had higher intrinsic motivation that the entity and control groups. Authors concluded that influences from incremental beliefs can have an effect on intrinsic motivation levels among youth when performing a specific task which allows for multiple attempts. It is also concluded that increased intrinsic motivation leads to beliefs that participants’ performance on the test would also improve.

Researchers recommend that teachers should point out to students that everyone has the ability to improve in an activity. Also stated, when providing feedback, it is important for teachers to encourage further attempts as students who believe there is room for improvement with practice, will participate with increased motivation.

Student Choice in Physical Education

Choice in physical education has the ability to provide students the opportunity to make decisions they feel personally invested in. When implemented
properly, choice has the opportunity to put students at the center of the learning process (Pagnano & Griffin, 2001). Youth in this day and age, want to “experience activities within PE that they enjoy in their leisure time and anticipate participating in when they are older” (Smith, Green & Thurston, 2009, p. 216). Giving student choice in physical education allows them to explore these activities.

Condon and Collier (2002) implemented a choice physical education program at a middle school in Ohio. Students (N=170) in sixth, seventh and eighth grade participated in physical education every day taught by two full time and one part time teacher. Students were given a survey to determine and rank their activity choices. Based on surveys, three choices emerged that included the following criteria: student input, elimination of activities that had been offered before, and activities that were going to be offered in the next teaching cycle. Students would participate in three, 9-week units allowing each student to experience their first choice at least once. With a small physical education staff, volunteers were recruited to assist the staff in teaching the three units. Volunteers were asked to evaluate students and, met with the staff to discuss roles and responsibilities.

At the end of each day, students ranked themselves based on their own effort for the day, while the volunteer also ranked each student on their effort. At the end of the unit comparisons were made between teacher and student and upon completion of the intervention students were interviewed to find out their views on the importance of choice and how choice affected their level of effort. Student responses solidified the fact that choices gave them the opportunity to participate in something they enjoyed and they were more likely to give a full effort.
The effects of choice in physical education was studied by Prusak, Treasure, Darst and Pangrazi (2004) to assess adolescent girl’s motivation in a physical education setting, as well as the repeating effects of the situational level to the contextual level. Seventh and eighth grade girls from 42 classes (N=1,110) and five junior high schools were studied. A modified Sport Motivation Scale (SMPE) survey was used to assess intrinsic motivation (IM), extrinsic motivation (EM) and amotivation (AM) on the contextual level. Motivation on the situational level was measures using a modified Situational Intrinsic Motivation Scale (SIMS).

Students were given the SMPE questionnaire one week prior to the beginning of the study to obtain a baseline of attitudes toward physical education. Students were randomly assigned to a choice or no-choice for a 10 day walking unit. Upon completion of the intervention, students were given the two surveys again. Data analysis showed that students with a choice were more intrinsically motivated, had a higher sense of identified regulation, and had a lesser sense of external control. These researchers suggest that giving students choice in physical education allows for students to have more responsibility and try a number of activities to determine what best fits their needs and enjoyment.

Ward, Wilkinson, Graser and Prusak (2008) examined the self-determination of girls with increased autonomy and how the increased autonomy activity levels are affected during physical education classes. Participants included 122 seventh and eighth grade students from four physical education classes. Each class was randomly assigned to either the treatment group (choice) or the non-treatment group (no choice). All classes participated in two, seven day fitness units which were a choice cardiovascular (CV) unit
and a non-choice CV unit. Three instruments were used to collect data during and after the study. Pedometers were used to measure step counts (used to report activity levels). The Situational Intrinsic Motivation Scale (SIMS) is a 14 item questionnaire used to determining situational motivation. The Sport Motivation Scale (SMS) used was a 16 item questionnaire measuring contextual motivation, often used for physical education because of its brevity. Results indicated that although girls were shown to greater more self-determination in an autonomy supportive environment, their activity levels did not increase based on pedometer step counts. After receiving choice treatment, participants were more self-determined, reinforcing the idea that choices in physical education lead to increased motivation. Self-Determination Index scores for group one, unit one (no choice), reported M=8.38, increasing to M=10.68 during unit two (choice). A Self-Determination Index mean for group two unit one (choice) was 8.94, dropping to a mean of 3.27 during unit two (non-choice). These investigators found that the self-Determination Index scores are affected more when students are given a choice and then the choice is removed.

Charter School Movement

During the last decade, charter schools have provided educational opportunities to more than 680,000 students in the US (Buddin & Zimmer, 2005). Charter schools are a part of the public school system that has the ability to provide students and teachers with more choice and operate with more freedom than traditional public schools. Giving opportunities for students to express individual learning styles and experience personal choices an innovative learning setting (WestEd, 2000).
An early study (Bettinger, 2005), compared test results of traditional public school students and charter school students and the impact of charter schools on neighboring public schools. Students (n=32) were tested in math and reading during 4th grade using standardized tests from the Michigan Education Assessment Program (MEAP). Researchers found that charter schools often attracted students with lower test scores in math and reading prior to enrollment. Results indicated that charter school students yielded lower scores in academic areas than traditional public school students. Results also reported no educational testing impact on neighboring public schools. Researchers noted reasoning may be attributed to financial resources, teacher experience and institutional immaturity among charter schools.

In a recent study (Dorner, Spillane & Pustejovsky, 2011) organization of public, charter and Catholic schools were examined. Staff from 11 (n=271) schools were given a survey regarding their school, work and network processes. Forty nine staff members were invited to participate in a qualitative interview. Public schools reported to use defined positions, standards, and curricula in organizing instruction and improvements for their school. Public schools used the metaphor ‘professional’ to describe their current organizational techniques. Catholic and charter schools took a more eclectic approach to organizing but, highlighted standards and prescribed curricula in their organizing process. Catholic and charter schools defined their organization development to be a ‘family’ run system.

All schools reported bonds between external, institutional goals, and technical goals. Programs such as No Child Left Behind were highly regarded in the educations’ organizing process among schools, leading to educational changes in schools. Changes in
public school systems could be a mediating factor and encourage changes in private and alternative education school choices.

Reported by Hurst (2004), the Eslie Whitlow Stokes Community Freedom Public Charter School faced a dilemma of providing students with enough physical activity. The low income urban school was unable to hire a physical education specialist in the K-6 school. The school was supported by local businesses to transport students to nearby parks and recreation centers for physical education classes. Students received 2 hours of physical education per week, including hiking, soccer, golf, football, tennis, bicycling and Tae Kwan Do. The principal of the school felt that physical education was imperative to students for academic achievement.

Warner (2009) reports on Francis W. Parker Charter Essential School which offers a wellness program combining health, physical education, games and fitness. Students attend wellness classes four days a week and the goal of the classes is not for students to be able to throw a perfect spiral or shoot jump shot but “to see the fun and strategy in making up new plays or working with their team to trick the offense or defense” (pg.71). Curriculum is designed to allow students of all levels to be successful and challenged. Students are split into two groups (competitive and instruction) so all students needs are met.

Students are often challenged physically and mentally and asked to step out of their comfort zone during activities. At the charter school, the staff is able to change mid-sets, attitudes and the expectations unlike traditional public schools. Risk taking and fear a major focus in physical education for these students. Students are given the opportunity to practice taking risks in a safe place and risk taking is modeled by teachers. Teachers
give students the opportunity to debrief the sport or lesson taught that day and encourage students to approach an experience with confidence and not fear.

Summary

The research in this review of literature represents students’ attitudes toward physical education, motivations in physical education, choice in physical education and the charter school movement. Students reported fitness and social aspects to be of highest importance in physical education. Although students reported fitness being important running was reported as their least favorite activity. Students who were taught skills such as weight lifting, dance, dual an individual sports, were more likely to continue participation in physical activity outside of class.

Students reported that participating in sport activities was enjoyable due to (1) fun, (2) liking sports in general, and (3) liking the activity offered. Programs providing students with activities that are challenging and interactive with peers give students a feeling of enjoyment and desire to put forth effort leading to a positive experience in physical education. Students given a variety of activities throughout their schooling are more likely to perceive physical education as enjoyable and have intentions to continue with physical activity outside of class.

Research indicates that with increasing age, students’ interest and enjoyment changes and curriculum design becomes more important to produce engaging and meaningful activities for students. Providing students with choices in physical education can lead to higher levels of effort, enjoyment and responsibility. Increased levels of self-determination and motivation are results from autonomous and supportive environments.
Research pertaining to the growing educational movement of charter school performance is still being conducted. Charter schools have shown mixed results in academic testing and impact on traditional public schools. Researchers report providing students with alternative learning environments may affect testing scores in major academic areas. Charter schools yielded lower test scores in early years upon opening, but increased once becoming an established school. Charter school performances and test results have been attributed to financial state, immaturity of school, and teacher experience. Research regarding physical education in charter schools is limited, however studies have shown that programs developed are nontraditional and tend to cater to individual needs.
CHAPTER III

METHODOLOGY

The purpose of this study was to examine charter high school student attitudes towards physical education. A survey and focus group interview were used to provide information about the students’ attitudes. Fitnessgram testing was used to determine individual and class fitness levels in combination with perceptions of Fitnessgram as indicated during focus group interviews. This chapter will provide information about the participants and setting, instrumentation, data collection and data analysis.

Participants and Setting

This study was conducted at a Northern California University including high school students from a nearby non-accredited charter high school. Students attend a physical education program at the university to fulfill the California secondary physical education requirement. The program was selected based on the curriculum design and the proximity to the researcher. Permission was obtained from the school district, the principal and parental consent forms were signed for each student (Appendix A). Students also signed a consent form regarding their understanding and willingness to participate in the study (Appendix B). Confidentiality of participants was used throughout the study and a pseudonym was used for the high school.
Participants were from Rockport Charter High School, which opened in the fall of 2010, and is currently undergoing the accreditation process. The charter school is focused on arts and sciences and was located on another public schools campus. The schools’ enrollment consisted of 270 students in 9th (115 students), 10th (96 students) and 11th (59 students) grade. Students enrolled at Rockport High School were members of local and surrounding communities and have come from other charter schools, as well as public schools, and home school in the nearby area.

All students in the program were invited to complete the survey and participate in the focus group interviews. A survey and focus group interviews were used to inform the researcher of attitudes, enjoyment, fitness testing, and curriculum choices in physical education class. Following the survey, four females and four males were asked to participate in focus group interviews. Participants for focus group interviews were chosen randomly using blind selection of cards with students names on them.

The university kinesiology department worked with Rockport High School to provide students an opportunity to participate in an innovative, standards and fitness based program. This program taught students activities that may guide them in the process of being physically active for a lifetime. Students were enrolled in the program since the start of the program in fall of 2010 and each student had chosen to be a part of this nontraditional program. The program took place after the completion of the students’ normal school day and on the university campus; which is adjacent to the public charter school.
Instrumentation

Data were collected using three research methods during this study. An attitude instrument (Subramaniam & Silverman, 2000) (Appendix C) using a Likert Scale, focus group interview (Appendix D) and Fitnessgram results were used to collect data. Patton (2002) suggests opening an interview with small talk to allow participants to become comfortable with the interviewer and others that will be in the interview. Predetermined open ended questions (Krueger, 1997) were used to gain information regarding attitudes toward choice, likes, dislikes, fitness testing and interests in the physical education program. Data from students Fitnessgram testing (PACER, curl-ups, push-ups, trunk lift, shoulder stretch, and sit & reach) was also used to identify participants’ fitness levels in the study (Welk & Meredith, 2008).

Survey

Students completed an attitude survey (Subramaniam & Silverman, 2000) during their physical education class. Questions were answered using a 5-point Likert scale ranging from strongly disagree to strongly agree. Following the attitude survey students were asked their age, grade and number of fitness tests achieved in the Healthy Fitness Zone (HFZ). All student responses were kept anonymous.

Focus Group Interview

Focus group interview questions were created by the researcher. Questions were specifically designed to obtain information about students’ attitudes towards physical education, their likes and dislikes, attitudes toward Fitnessgram testing, and choice in physical education class.
Students were randomly selected to participate in focus group interviews. A graduate student in the kinesiology department who was familiar with the study, the instrumentation, and youth in physical education conducted focus group interviews to avoid teacher bias. Interviews were conducted in a conference room and students were made sure to feel comfortable with the interviewer.

Fitnessgram

All students participated in Fitnessgram testing, except one student who was injured during the data collection period, for the purpose of this study and school district requirements. Fitnessgram tests were administered by the researcher and another teacher in the program on a regular basis. All scores were reported based on achievement of total tests in the Healthy Fitness Zone.

Data Collection

Prior to starting data collection, written permission was obtained from the university, school district, principal, parent/guardian, and student. Once data collection initiated, students were reminded that their responses and Fitnessgram scores would remain anonymous and their grade would not in any way be affected by their participation or lack of participation in the study.

Data collection took place during the student’s physical education class. Students who did not return informed consent forms or did not wish to participate in the study were given an alternative activity during the time of survey and focus group interviews. Students were given written and verbal instructions before answering questions. Students were encouraged to ask questions about any portion of the survey
they did not understand or needed clarification for. Students were randomly selected to participate in focus group interviews. Students were taken to a conference room where the interview was conducted. During this time students were reminded they did not have to answer any questions they did not feel comfortable with and to answer all questions honestly, with as much detail as possible.

Interviews were conducted by another graduate student at the university who was familiar with the study and has experience working with children. The interviewer was instructed by the researcher to follow the guidelines suggested by Bogdan and Biklen (1998) during the focus group interviews with students. The guidelines suggest:

1. creating a comfortable environment so participants and interviewer feel at ease and able to speak freely,
2. allowing silence may be necessary for participants to gather their thoughts,
3. always give participants your full attention and listen carefully
4. remember that you are interviewing someone on how they think,
5. Provide clarity when needed
6. Be flexible when needed
7. Avoid being judgmental (Bogdan & Biklen, 1998).

Interview questions were used to further understand likes, dislikes and feelings about Fitnessgram testing, choice in physical education and attitudes toward physical education class. All interviews were audio taped for transcription.

Data Analysis

Data from the 20-item attitude survey were compiled and analyzed. A computer program (SPSS) was used to analyze data and produce frequency scores and, percentages among each question. Total percentages were calculated for each factor of
questions (positive enjoyment, negative enjoyment, positive usefulness, negative usefulness). Fitnessgram data were analyzed by calculating total number of participants achieving the HFZ for each test. Scores were also reported by total number of tests achieved in the HFZ in each grade level.

Focus group interviews were audio taped and transcribed by the researcher. Upon transcription of interviews, written material was examined to identify themes and common statements. An inductive analysis approach was used allow themes to emerge directly from the interviews with out influence of pre determined data. Using a bottom up approach to constantly re-evaluate transcriptions allows for commonalities and themes among statements to emerge (Patton, 2002).

Program Overview

Students at Rockport Charter High School were required to complete 20 high school credits of physical education during the course of their schooling (generally 9th and 10th grade). Rockport did not have a physical education program intact; students were required to participate in independent study physical education (ISPE). ISPE must total 200 minutes each week and students were held accountable by turning in weekly logs. Students could complete hours in a variety of ways: dance classes (which they took as a part of their academic course load), karate, working out at a gym, sports practice and games, walking to school, bike riding, etc. or participating in the program at the university however, students were not able to have parents sign off on activity time.

The university program was designed as a supplemental option for Rockport Charter High School students. The program used Corbin and Lindsey's (2007) Fitness
For Life book as a basis for the curriculum. Using self-management skills and fitness concepts in a variety of activities, students are taught the importance of lifetime fitness. The program started with 30 minutes of fitness based activities and stations before students participate in their chosen activities. Throughout the semester, students were introduced to a wide variety of activities including: Adventure Racing, scavenger hunts, BOSU balls, step aerobics, cardio kick boxing, Dyna bands, and Katami Bars as forms of lifetime activities.

At the beginning of each three-week unit students were given three activities to choose from that they would participate in for the unit. Activities choices included: weight training, gymnastics, Ultimate Frisbee, ballroom dance, lacrosse, yoga and outdoor education. Although choices were limited, it was the goal of the teachers that by giving students choice, they would be more motivated to participate and have a positive attitude toward physical education. Students were able to repeat an activity twice for a total of 6 weeks with the goal that students would be able to further develop skills. Within these activities students were taught how to use heart rate monitors, calculate target heart rate, use pedometers and set individual goals for fitness testing.

At the end of each unit students participated in Fitnessgram testing to evaluate personal progress. Students were given an in class assignment to reflect on progress and re-evaluate short term goals. Students were also given the opportunity to discuss reasons why scores may have decreased from previous testing and ways to increase activity to perform better on the next test.
CHAPTER IV

RESULTS AND DISCUSSION

This chapter is divided into three sections. The first section provides an overview of the context of the school, to include a detailed description of the physical education program and characteristics of participants involved in this study. The second section includes results from the quantitative survey data and focus group interview data. The final section of this chapter is the discussion of the results.

Context and Participants

School Description

Rockport Charter High School is located in a Northern California town with a population of approximately 87,000. The high school is currently located on another public high school campus. This is the first year of operation for the school and it is currently undergoing the accreditation process. The school currently serves 260 students in 9th, 10th and 11th grade. Rockport is a charter school focusing on visual and performing arts and sciences and provides students with a small learning community. According to the school website, Rockport High holds high expectations for students and offers a rigorous Advance Placement curriculum in various college preparatory courses. Rockport High promotes students to explore their personal talents and passions within a smaller learning community using personalized learning environments.
Rockport did not have a formal physical education program, yet students were required to complete physical education credits through independent study physical education (ISPE). ISPE students were able to fulfill physical education requirements through activities such as walking to school, running, biking, hiking, working out at the gym, dance, martial arts, being a part of sports teams and other approved physical activities. The two public high schools in the same community had traditional multi-activity programs and all students were required to take four years of secondary (two years in middle school, two years in high school) physical education.

Program Description

In conjunction with Rockport High a nearby university has created a program to meet the requirements for ISPE. Students voluntarily enrolled in the program and receive high school credit. Students attended the program after school for 100 minutes two days a week. At the time of the study, enrollment in the program was 21 students. Data were collected from 20 students, as one student was unable to return the signed Parental Informed Consent letter. The researcher and another graduate student designed the program; a professor at the university oversaw it.

The program was developed using Corbin and Lindsey’s (2007) *Fitness For Life* curriculum. Using self-management skills and fitness concepts students were taught various physical activities and integral cognitive concepts for lifetime activity. During class, students started with 30 minutes of fitness to include: step aerobics, kick boxing, strength training, dancing, and other individual activities. The remaining time was allocated for student selected activities and sports.
During the first semester, all students participated in prescribed activities which included: Ultimate Frisbee, dancing, inline skating, yoga, soccer, cardio kick boxing, step aerobics, adventure racing and scavenger hunts. During the second semester (data collection period) students elected physical activities. At the beginning of each unit students were presented with curriculum choices in units of three to four weeks. Activities included: weight lifting, gymnastics, Ultimate Frisbee, dance, yoga, low elements, high elements (ropes course) and rock climbing. Upon unit completion students were given a new set of curriculum choices.

During both semesters students filled out a daily self-evaluation rubric. The rubric was based on readiness for class work, meeting class expectations, acceptance of classmates, diligence of activity participation, and their overall attitudes for the day. Students scored themselves on a one (lowest) to five (highest) score. At this time, students were able to write comments about activities they liked, disliked, things learned or any other reflections they had for the day. This rubric was a key factor in the grading process. The teachers evaluated the students on the same criteria and recording noted discrepancies between the student and teacher evaluations.

The fall semester course grading was based on a pass/fail system and the university program and instructors did not have control of student grades. As long as students attended and participated, they received a passing grade according to the Rockport ISPE guidelines. This process was revised at the start of the spring semester and the teachers assigned letter grades for all students based on criteria established at the beginning of the semester. The criteria included, participation, effort, attitudes and readiness for class.
Undergraduate majors in the university physical education teacher education program were required to teach the Rockport students. The last five weeks of the spring semester were taught by various undergraduate student teachers who followed lesson protocols for the course requirements. During a two week period undergraduates taught required (no student choice) sport activity lessons (soccer, Gaelic football and basketball) to the Rockport students. During the lessons, undergraduate student’s team-taught in groups of four or five.

During the final unit (three weeks) of the semester all students participated in low elements, high elements and rock climbing taught by undergraduate students from the university outdoor education class. During the final unit of outdoor education students were given choices within the lessons. During rock climbing students were given opportunities to learn knot tying, belaying, bouldering, and climbing. During the high element activities, students were able to choose their level of difficulty.

This program placed emphasis on setting fitness goals, self-management skills and cognitive information on physical education and physical activity. Through various activities, students learned to use heart rate monitors and pedometers. Fitness was a high priority in the program, incorporating the five components of health related fitness (cardio vascular endurance, muscular endurance, muscular strength, flexibility and body composition) in daily lessons. Although data were not collected on these aspects of the research, they may have impacted students’ attitudes about physical education and physical activity.
Student Descriptions

In observing the class over the course of the year, Rockport students in this study shared comments that lead the researcher to believe they were allowed an ample amount of personal expression their academic classes. Students were encouraged to explore their talents in academic areas and are given freedom in how to present information learned in many of their classes. Students were often known to challenge their academic teachers, which transferred into the physical education setting. Two participants in this study felt they could participate when they wanted to and chose to sit out or be less active during an activity if they were not enjoying it.

The following information describes each of the students who participated in the focus group interviews. The following eight students described are the students randomly selected for the focus group interviews. The information was generated from teacher observations as well as daily feedback (rubrics) provided by students. All names have been changed for confidentiality.

Tommy was a highly skilled student who enjoyed Ultimate Frisbee, football, rock climbing and weight lifting. Tommy tended to be more reserved in class, but was always actively participating to the best of his ability. Tommy enjoyed learning about the different sports and was very eager to help other students throughout the year. His effort in class, enthusiasm about physical activity and ability to get others involved was appreciated and infectious. Tommy achieved the Healthy Fitness Zone (HFZ) for all 5 physical fitness components.

Steve was also a sophomore who enjoyed football, Ultimate Frisbee, inline skating and weight lifting. Steve was very vocal, often expressing his opinions about an
activity or game, both positive and negative. He achieved the HFZ for all components and showed a high level of physical fitness.

Scott was a quiet student who did not like physical activity before attending this program. His mother contacted the researcher and said he would not participate in PE or other activities and spent a majority of his time playing video games. During the program she stated that he came home sweating and raving about his new Physical education class. Scott passed all five components of the Fitnessgram testing. Scott was very active in class and enjoyed inline skating, Ultimate Frisbee, weight lifting and football.

Eddy was a student who was not afraid to speak his mind and often times would question the teachers for the purpose of arguing. He believed that most rules and safety guidelines should not apply to him. Although he was seen as a leader and admired among his friends, some peers felt he needed to comply with teacher directions and accept class rules. He was extremely active both in and outside of class. He achieved the HFZ for all components and enjoyed football, yoga, gymnastics, Ultimate Frisbee and having the opportunity to choose his activities.

Kelly was one of the more active females in the program. She was very outgoing and willing to try new activities. She enjoyed having new teachers in class and the variety of warm-ups. Kelly had back problems and was only able to pass 4 of the Fitnessgram tests. Kelly stated that physical education had taken the place of sports for her because her school did not offer them. Kelly enjoyed, football, dancing, ropes courses and rock climbing.
Courtney was a moderately skilled student who struggled with a physical disability. Her physical disability limited her in some activities (particularly running), however, she attempted all physical activities and had a positive attitude toward physical education. Courtney enjoyed rock climbing, ropes courses, gymnastics, football and soccer. Courtney achieved the HFZ for 4 of the tests.

Sarah was a student who put forth little effort during class and tended to have a negative attitude with teachers. She had days that she was very involved and seemed to enjoy the activities, but other days she did not participate and made it known to students and teachers that she did not want to be in class. She enjoyed soccer, dancing and yoga. During the focus group interview, she did not answer any of the questions. Sarah scored within the HFZ for 4 out of 5 tests.

Melody was another student who tended to be on the quiet side and had varying attitudes about physical activity and levels of effort during class. She was interested in, dance, yoga and gymnastics. However, she did not put forth effort or a positive attitude during activities she was less interested in, to include football, soccer, Ultimate and rock climbing. She scored within the HFZ for all 5 tests.

Results

Survey Results

Twenty students completed the attitude survey. Of the 20 students participating in the survey, 3 (15%) were 14 years old, 9 (45%) were 15 and 8 (40%) were 16, the average age was 15.3 years old. Six students (30%) were in 9th grade and 14 students (70%) were in 10th grade.
Table one represents percentages for each response of each question from the attitude survey (Appendix A). Question 13 was deemed ambiguous and omitted from the results due to a typographical error in the original instrument. Seventy percent (70%) of participants agreed or strongly agreed that physical activities in physical education class were interesting for students. Eighty (80%) of remaining one student (5%) was uncertain. Sixty percent (60%) of participants agreed or strongly agreed that activities learned in physical education class were important. Eighty-five percent (85%) disagreed or strongly disagreed that activities learned were unimportant. Sixty-five percent (65%) of participants agreed or strongly agreed that their physical education teacher got them excited about physical education. When asked participants disagreed or strongly disagreed that activities learned in physical education class were unpleasant. Nineteen participants (95%) disagreed or strongly disagreed that their physical education teachers made physical education class seem unimportant, the specifically if the activities they learned got them excited about physical education over half of the participants (55%) agreed or strongly agreed. Thirty percent (30%) of participants were uncertain that the activities they learned got them excited about physical education.

When asked if their physical education teacher made learning in class useless, eighty five (85%) disagreed of strongly disagreed. Sixty five percent (65%) of participants felt the activities they learned in class were useful, while twenty percent (20%) were uncertain. Seventy (70%) of participants agreed or strongly agreed that their physical education teacher made physical education class valuable for them. Twenty-five (25%) of participants were uncertain if the activities they learned made physical education class seem important. Eighty-five (85%) of participants agreed
### Table 1

*Survey results for questions 1 through 20 (13 omitted)*

<table>
<thead>
<tr>
<th>Question</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Uncertain</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>#1 The activities I learn in physical education make my physical education class interesting for me</td>
<td>20%</td>
<td>50%</td>
<td>20%</td>
<td>10%</td>
<td>0%</td>
</tr>
<tr>
<td>#2 The activities I learn in my physical education class make learning unpleasant for me</td>
<td>5%</td>
<td>5%</td>
<td>10%</td>
<td>30%</td>
<td>50%</td>
</tr>
<tr>
<td>#3 The activities I learn in my physical education class get me excited about physical education</td>
<td>20%</td>
<td>35%</td>
<td>30%</td>
<td>10%</td>
<td>5%</td>
</tr>
<tr>
<td>#4 My physical education teacher makes my physical education class seem unimportant to me</td>
<td>0%</td>
<td>0%</td>
<td>5%</td>
<td>10%</td>
<td>85%</td>
</tr>
<tr>
<td>#5 I feel the activities I learn in physical education make my physical education class unenjoyable for me</td>
<td>10%</td>
<td>5%</td>
<td>10%</td>
<td>40%</td>
<td>35%</td>
</tr>
<tr>
<td>#6 I feel the activities I learn in my physical education class are useless to me</td>
<td>5%</td>
<td>5%</td>
<td>15%</td>
<td>30%</td>
<td>45%</td>
</tr>
<tr>
<td>#7 The activities I learn in my physical education class seem important to me</td>
<td>15%</td>
<td>45%</td>
<td>25%</td>
<td>5%</td>
<td>10%</td>
</tr>
<tr>
<td>#8 My physical education teacher makes my physical education class seem important to me</td>
<td>45%</td>
<td>30%</td>
<td>15%</td>
<td>5%</td>
<td>5%</td>
</tr>
<tr>
<td>#9 My physical education teacher makes my physical education class interesting for me</td>
<td>40%</td>
<td>40%</td>
<td>5%</td>
<td>10%</td>
<td>5%</td>
</tr>
<tr>
<td>#10 The activities I learn in my physical education class are useful to me</td>
<td>30%</td>
<td>35%</td>
<td>20%</td>
<td>10%</td>
<td>5%</td>
</tr>
<tr>
<td>#11 I feel my physical education teacher makes learning in my physical education class fun for me</td>
<td>45%</td>
<td>40%</td>
<td>0%</td>
<td>10%</td>
<td>5%</td>
</tr>
</tbody>
</table>
Table 1 (Continued)

<table>
<thead>
<tr>
<th>Question</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Uncertain</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>#12 I feel my physical education teacher makes my physical education class unenjoyable</td>
<td>5%</td>
<td>0%</td>
<td>10%</td>
<td>25%</td>
<td>60%</td>
</tr>
<tr>
<td>#14 The activities I learn in my physical education class seem unimportant to me</td>
<td>5%</td>
<td>0%</td>
<td>10%</td>
<td>35%</td>
<td>50%</td>
</tr>
<tr>
<td>#15 My physical education teacher makes my physical education class useful for me</td>
<td>30%</td>
<td>45%</td>
<td>10%</td>
<td>5%</td>
<td>10%</td>
</tr>
<tr>
<td>#16 I feel my physical education teacher makes learning in my physical education class valuable for me</td>
<td>35%</td>
<td>35%</td>
<td>10%</td>
<td>15%</td>
<td>5%</td>
</tr>
<tr>
<td>#17 I feel my physical education teacher makes my physical education class valuable for me</td>
<td>40%</td>
<td>30%</td>
<td>15%</td>
<td>10%</td>
<td>5%</td>
</tr>
<tr>
<td>#18 I feel my physical education teacher makes learning in my physical education class useless for me</td>
<td>5%</td>
<td>10%</td>
<td>0%</td>
<td>15%</td>
<td>70%</td>
</tr>
<tr>
<td>#19 My physical education teacher gets me excited about physical education</td>
<td>15%</td>
<td>50%</td>
<td>10%</td>
<td>20%</td>
<td>5%</td>
</tr>
<tr>
<td>#20 I feel the activities I learn in my physical education class make learning fun for me</td>
<td>30%</td>
<td>35%</td>
<td>15%</td>
<td>10%</td>
<td>10%</td>
</tr>
</tbody>
</table>

or strongly agreed that their physical education teacher made learning in physical education class fun.

Table two represents the combined percentages of attitude questions. Seventy percent (70%) of students agreed or strongly with positively worded statements regarding enjoyment in physical education. Eighty percent (80%) of students strongly disagreed or disagreed with negatively worded questions regarding enjoyment. Seventy percent (70%) of students agreed or strongly agreed with positively stated questions about usefulness of
Eighty-five (85%) of students strongly disagreed or disagreed with negatively stated questions regarding usefulness of physical education.

Table 2

*Distribution of overall attitude statements*

<table>
<thead>
<tr>
<th>Question</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Uncertain</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positive Enjoyment</td>
<td>28%</td>
<td>42%</td>
<td>13%</td>
<td>12%</td>
<td>5%</td>
</tr>
<tr>
<td>Negative Enjoyment</td>
<td>7%</td>
<td>3%</td>
<td>10%</td>
<td>32%</td>
<td>48%</td>
</tr>
<tr>
<td>Positive Useful</td>
<td>33%</td>
<td>37%</td>
<td>16%</td>
<td>8%</td>
<td>6%</td>
</tr>
<tr>
<td>Negative Useful</td>
<td>4%</td>
<td>4%</td>
<td>7%</td>
<td>22%</td>
<td>63%</td>
</tr>
</tbody>
</table>

**Fitnessgram Data**

A total of nineteen students completed Fitnessgram testing. One student was unable to complete the testing due to an injury. Students completed five tests:

- Cardiovascular endurance (PACER or mile),
- Muscular strength (push-ups),
- Muscular endurance (curl-ups),
- Flexibility (sit and reach or shoulder stretch),
- Body Composition (Body Mass Index).

Table 3 presents participant results from fitness testing. Only one (5%) student achieved the Healthy Fitness Zone (HFZ) for 1 test. No students achieved HFZ for 2 tests. Two students, (11%) achieved the HFZ for 3 of the tests, 4 (21%) achieved the HFZ for 4 tests, and the remaining 12 students (63%) achieved the HFZ for all 5 tests.
Table 3

*Fitnessgram Healthy Fitness Zone Distribution*

<table>
<thead>
<tr>
<th>Grade</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>9th grade</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>10th grade</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>10</td>
</tr>
<tr>
<td>Total Students</td>
<td>1</td>
<td>0</td>
<td>2</td>
<td>4</td>
<td>12</td>
</tr>
<tr>
<td>Total = 100%</td>
<td>5%</td>
<td>0%</td>
<td>11%</td>
<td>21%</td>
<td>63%</td>
</tr>
</tbody>
</table>

**Focus Group Interview**

The qualitative data were collected through two focus group interviews and conducted by another graduate researcher to minimize interviewer bias. Questions pertaining to students’ attitudes toward choice, physical education teachers, likes and dislikes and Fitnessgram testing were asked by the interviewer (Appendix D) Groups were divided by gender, with four members in each group. Single gender groups were used to minimize showing off, provide an open forum for both genders and maximize in depth responses. Knowing the class composition, single gender grouping also allowed for the females, who tend to be shyer, to feel more comfortable answering the questions.

All interviews were transcribed by the researcher and analyzed to develop themes and common statements among the two groups of students. During the focus group interviews, females tended to take their time and think about each question before answering. The females seemed more reserved and provided short answers with minimal details. Focus groups interviews lasted between 18 and 27 minutes. One student (Sarah)
did not provide answers to any of the questions. Male students in the focus group interview were serious and very enthusiastic in their responses. All males were active participants and eager to be heard thus providing the researcher with details and strong attitudes (both positive and negative about the program. During the male focus group interview, the interviewer had to repeat three questions for clarity.

Theme One: “We Don’t have to do a Certain Thing!”

During interviews, many students responded to questions with answers pertaining to the curricular choices in the physical education class. Both males and females felt that content choices in physical education were important and made physical education more enjoyable. Students discussed various aspects of the program that allowed them to have choice. When asked about choice in physical education Kelly stated:

The little sheets they do every day after class is where we rate ourselves, it is a way for us to reflect on how we did I guess. And it helps a lot, so that we know we have a choice to work hard or a choice to not try and we understand that at the end of the day you either tried hard or didn’t try and it is your choice.

Courtney followed up this comment by saying “also, you can communicate with them teachers and tell them what you think they can improve on and what you liked and didn’t like.”

When asked questions regarding interest and meaning of physical education students reported that choice was of value. Courtney explained that having choice allowed her to have more fun because she was not forced to do something she did not want to; she was able to enjoy an activity because she was the one to choose it. Kelly followed up with a response regarding choices in fitness testing. She discussed that
students were given the choice between the PACER and running the mile. Kelly stated “I like running, and other people don’t, do everybody kinda gets what they like to do…we don’t have to do a certain thing, we get to change it up.”

During the interview with the males choice did not come up as often as with the female students. Scott stated that having choice in physical education made class more fun and interesting. Tommy reported that they were not forced to do a sport that they didn’t have any interest in doing. Eddy mentioned that he thought students should be able to write down their choices on the board at the beginning of the year and then vote for them. Eddy stated, “they give us choices, like out of these three what would you like to do, so if you want to do something else, [it] sucks for you.”

Theme Two: To Like or Not to Like

Students participating in the focus group interviews had various likes and dislikes throughout the program. Among having choice as a likeable experience in the program, students explained certain aspects and specific activities they liked during physical education class. Kelly reported that physical education has replaced sports for her, referring to the fact that Rockport Charter High does not have an interscholastic sports program for their school. She also reported that learning all aspects of a sport was enjoyable for her and putting them into game situations, compared to other previous physical education programs that do not.

Courtney enjoyed the competition in physical education stating, “I like when we have competitive games where you can win against someone.” During the male interview Steve seemed to have the same feeling and stated, “When you play a sport that is fun, being as competitive as I am, winning means a lot to me, I like when we
absolutely annihilate the team that’s fun for me.” After being questioned by another student about not having fun if you lose, Steve went on to say, “I like it if it is intense.”

Melody and Courtney reported disliking running in physical education but later explained that they enjoyed a scavenger hunt activity that involved a lot of running. Males reported disliking the university student teachers and warm-ups.

Some of the males in the group explained that one of the biggest dislikes was the lack of respect for all the teachers and on several occasions. Tommy stated, “It is one thing to not try and then there is another thing to not try and also be causing a disturbance.” Scott agreed with Tommy by stating:

Something I don’t like is when people are disrespectful to other people and there some people in the class who are disrespectful to the teachers… it is unnecessary. There is a point when is it courteous to just listen to what they say.

Eddy pointed out that he does not like when people in the class bring down the whole class by not playing or giving effort.

During this portion of the interview, the males were very concerned about how students were treating the teachers and other students in class and seemed to mention a particular student multiple times who was a constant disturbance. One of the males (Eddy) in the interview was also pin pointed in being someone who asked a lot of questions and often times they were unnecessary questions that he already knew the answers to. Eddy followed up with a response and agreed that “yeah, sometimes I ask questions without thinking.”

Although some students enjoyed being taught sports and games that were new to them, most did not enjoy activity modifications (small sided games) where students were asked to overlook the rules to an official game. Eddy identified a soccer lesson that
was altered, students had to pass the ball to certain people before scoring, he did however understand the purpose, “…I guess that makes sense because you want everyone to get a feel for it.”

**Theme Three: Boring; Old Fitness Testing**

Courtney and Kelly both agreed that fitness testing was not something they enjoyed. They both made statements “I don’t think anyone really enjoys it.” Kelly did, however, understand that fitness testing was not something that could be changed to make more fun and that “it got to the point where it was just something we have to do.” When asked what was boring and routine about physical education class, Courtney reported “Um, the fitness tests.”

Eddy and Tommy both agreed that running the mile was more desired for cardiovascular testing as opposed to the PACER. Tommy stated “I just think they are unnecessary [fitness testing].” Eddy replied with “No [fitness testing], they are” Tommy then retracted his previous statement and semi-agreed by stating “well, kinda.” Scott and Steve later responded that the testing was used as a way of measurement for both students and teachers. Scott stated, “Also it is because for the people who run the program, it is helping them see if what they are doing is helping.”

Some of the students also noted that they were in their second year of high school physical education and that they should not be tested (referring to the fact that California mandates reporting of scores in 5th, 7th and 9th grade). It was also stated that other high schools in the area did not test in 10th grade. Some students didn’t understand the meaning behind the testing because of the reporting policies.
Students made suggestions about modifications for fitness testing. Males agreed that students should be allowed to perform a higher number of curls ups before being terminated (at the maximum of 80). Suggestions for another form of cardiovascular testing was made by Steve, he suggested having students run on a treadmill and testing stamina by how long they could run.

**Theme Four: Overwhelmed by Multiple Teachers**

Students had opposing opinions about the student teachers that were invited to teach lessons. Kelly stated, “The teachers change all the time which is kinda fun. Where we don’t have the same teacher or if we don’t like a teacher we know that they are not going to be there for very long.” On the other hand Eddy, Steve and Scott noted that they had student teachers constantly and it needed to be balanced out. Scott pointed out “we had really good teachers for the first half of the year and then we pretty much had all student teachers for the second half.” University undergraduates taught students for the final weeks of the semester in this study.

Steve reported that some of the student teachers that came in were enjoyable and they learned a lot from them. Steve mentioned one particular teacher and described him as very enthusiastic about what he was doing and that he would talk to students on a more personal level, and took interest in the students. He continued to discuss that there needed to be a balance of regular teachers and student teachers in physical education class.

When asked how teachers made students time in physical education worthwhile, students responded that time was spent in a worthwhile manor. The majority of interviewees felt that most teachers were enthusiastic about the lessons making them
more likely to participate. Eddy stated, “They try and keep you active the whole time which is helpful.”

Discussion

This discussion is guided by the research question and explains the results about charter school student attitudes toward physical education. The sources of data in this study included the attitude survey, focus group interviews and fitness testing. It is important to understand that there are external factors that can be associated with student attitudes. Teacher’s curriculum development and enthusiasm of physical education has the ability to positively or negatively influence a student’s attitude towards physical education (Bibik, Goodwin & Omega-Smith, 2007). Students are more likely to take interest and experience success in an environment which allows students to be comfortable and feel confident (Subramaniam & Silverman, 2007).

Overall, participants had a generally positive attitude towards physical education which was consistent with Subramanian and Silverman (2007). However, this study did not analyze data using the same statistical methods, and differences among grade levels were not assessed. In Subramaniam and Silverman (2007) a multi-variate analysis of variance was used to interpret attitudes using grade level and gender. This study on charter school students did not differentiate grade level and gender, but an overall attitude among students. Subramaniam and Silverman (2007) reported a decline in attitude as grade level increased which could have explained some of the uncertain or negative attitudes toward physical education. Descriptive statistics were not analyzed because of the uncertain response allowed. Some students may have answered a one on a
question, while other answered five leaving the average to be three, which was equivalent to the ‘uncertain’ response, which tells the researcher very little about the students’ attitude. Student’s positive and negative attitudes in physical education can foster their attitudes toward physical activity and influence their participation in physical activity later in life. There are a myriad factors that influence student attitudes in which educators need to address for students to have an enjoyable experience in physical education.

When looking at usefulness of activities during physical education class, 15 (75%) students disagreed or strongly disagreed that the activities they learned in class were useless (Table 1, question 6). Students who did not feel this way may not have been interested in the activities they were currently participating in at the time of the survey. Students may have also felt that activities were not something they would choose to do outside of class and thus felt they were useless to them. When asked the same question, from a positive perception, 13 (65%) students strongly agreed or agreed that activities learned in physical education class were useful (Table 1, question 10). It is possible that the inconsistency in percentage of responses was due to: question placement, students rushing through the survey or a previous question influencing their choice.

Based on results from the interviews, several reasons were given as to why curriculum choice was positive in physical education class. Giving student’s choices in physical education has the ability to increase motivation in students (Pagnano & Griffin, 2001; Prusak, Treasure, Darst & Pangrazi, 2004; Ward et al., 2008). According to focus group interviews, students in this study reported that having choices made their experience more enjoyable and students felt they were not forced to do something they
did not like or were not as good at, which coincides with findings of Condon and Collier (2002).

When students discussed fitness testing during focus group interviews, there were opposing opinions initially examined and then several students changed their minds about the value of the tests. Students understood the importance of the fitness testing, but had opposing responses about the importance of assessment. Some students reported testing was unnecessary and unenjoyable, while other reported that it was a necessary tool for measurement. The ambivalence among students could be due to peer influence. Prinstein and Dodge (2008) describe that peer influence and conformity can be particularly likely when an adolescent is in the presence of someone who they perceive to be of higher status. As the researcher noted in the student descriptions, one of the students was highly liked by his peers and admired in the class. Changes in student opinions throughout the interview may have been due to a lack of self-esteem or self-confidence in the presences of others.

Fitness scores in this study reported a higher percentage (63%) of students achieving the HFZ for all tests compared to the norms in California, in which 39% of students achieved the HFZ for all tests. The percentage of students achieving the HFZ for all tests in the school district was closer (49%), (CDE, 2010), but still lower than the students at Rockport. Students in this study reported that other district schools did not test students during their sophomore year, which could have also influenced students’ perceptions toward fitness testing. Students may have been confused about when tests are given and for what purpose. Some of the students’ attitudes toward fitness testing may have been more positive if they had been given more reasoning and explanation of
benefits. Fitness testing was administered during class and students may have felt this detracted from other activities, thus contributing to the negative attitudes.

Fitness components were incorporated throughout daily activities. Goal setting activities and discussion were used after each fitness test to allow students to plan for future tests. It is possibly that increased fitness score were due to the variety fitness concepts and the incorporation of self-management skill throughout lessons. Activity time during the 100 minute lessons was maximized and very little wait time occurred.

There is controversy in the physical education field about the validity of the Fitnessgram testing methods, particularly the curl-up test. Some students suggested that fitness testing be done using other methods.

Although there were a variety of attitudes towards fitness testing, during focus group interviews although students stated fitness testing was unenjoyable, two students mentioned health and fitness as an important factor and class time worthwhile. This finding coincides with the findings of Luke and Sinclair (1991) who found fitness testing to be an unfavorable part of physical education. Students at Rockport were not required to just run during class. Cardiovascular endurance and muscular endurance were improved using a variety of learning activities. In this study there were a variety of methods utilized to present fitness and incorporate fitness activities into curriculum to make it more enjoyable and meaningful for students. Although this program was fitness based, the research did not explain attitudes toward fitness in general, but the Fitnessgram fitness testing.

Some students expressed conflicting opinions about the undergraduate student teachers. During the course of this study, undergraduate physical education majors taught
lessons as a part of their undergraduate course requirements. It is possible that some of the students’ negative attitudes toward this physical education program were due to the many teachers that prepared and implemented lessons. This may have caused some confusion and developed loyalty toward the primary instructors. During focus group interviews some students expressed that they enjoyed the variety of teachers and some of the teachers provided an enjoyable experience.

Students who responded ‘uncertain’ during the survey may have based their decision on the multiple teachers throughout the semester and not the primary teachers due to the time in the semester the survey was given. There were students who identified the multiple teachers as an unenjoyable experience. Although the survey was not specifically asking about student teachers versus regular teachers, thirteen (65%) students agreed or strongly agreed that their physical education teacher got them excited about physical education.

Only three (15%) students strongly agreed or agreed that their physical education teacher made physical education class unenjoyable. Although the survey data were favorable for students’ positive responses to the teachers, some students in the interview expressed otherwise. In retrospect, a longer interview may have allowed for more detailed responses about teachers. Students may have reflected on what they were currently experiencing in physical education and not the overall experience. It is consistent with research that students find physical education more enjoyable when their teacher is enthusiastic about teaching as well as physical education in general (Smith & St. Pierre, 2009).
Understanding student perceptions about physical education is an important part of research (Graham, 1995). The results of this study agreed with results of McKenzie, Alcaraz and Sallis (1994) and Rikard and Banville (2006), and, suggest that students prefer game play compared to fitness activities. However, students expressed enjoyment when fitness activities were infused into physical activities. The students in this study identified game play and activities in which they could be competitive as a desirable experience, which was consistent with the findings of Alkire (2008) who studied students from the same school district just three years earlier. Competition in the Rockport program came from individual goals and internal motivation as well as competition in game play (Ultimate Frisbee, soccer, football etc.)

Participants in this study reported competition and new activities to be a main factor of enjoyment in physical education. This finding was not consistent with the works of Rikard and Banville (2006) which found that 19% of students reported fun as being the top factor. Although Rockport students reported fun as being important factor in physical education, during interviews students were able to elaborate and discuss their enjoyment of competition in physical education.

Competition in physical education was expressed as an enjoyable experience for students. Providing students with the skills and knowledge to play a competitive game or sport was favorable. Developing a strong motor skill base is essential for development of skills later in life. It is important to understand that due to the small class size (n=20) students were able to actively participate in sport and game play. This leads to more participation and less inactive (wait) time. With a larger number of students on a team there is typically more standing around and less student involvement. The researcher
concluded that students enjoyed competition and game play because they were able to transfer the skills they had previously learned. This researcher believes the positive attitudes in this study were due to the student choice, variety of curriculum (Ultimate Frisbee, football, gymnastics and weightlifting), nontraditional teaching methods and appropriate competition.

This researcher believes that among choice, enthusiastic teachers and competition, positive attitudes in this study may be attributed to other factors. The program took place on a university campus, which could have made the students feel privileged to use the equipment and facility. Students were offered a variety of activities which may not normally be offered in a traditional physical education program. Students in this program did not have figure out or log their physical education minutes required by Rockport like other students at the school.
CHAPTER V

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

The following chapter is divided into four main sections. The first section will discuss a summary of the research and results. The next section will review the conclusions based on the research questions. The third section will discuss the implications for future and current physical educators. The final section will detail the recommendations for current and further research.

Summary

The purpose of this study was to examine attitudes of charter high school student’s toward physical education. This study took place at a university in Northern California with students from a nearby charter high school. The study entailed collecting data from 20 students in 9th and 10th grade using an attitude survey, fitness testing and focus group interviews. Surveys were administered to all students who returned parental consent forms. Upon completion of the surveys, four males and four females were chosen at random for focus group interviews. Seventy percent (70%) of participants in this study agreed or strongly agreed with all positively stated questions regarding usefulness and enjoyment in physical education class. Eighty-five percent (85%) of participants agreed
or strongly agreed that their physical education teacher made learning in physical education fun. Survey results identified that ninety-five percent (95%) of students disagreed or strongly disagreed that their teacher made physical education unimportant, only ten percent (10%) and eight percent (8%), respectively, agreed or strongly agreed with all negatively stated questions about usefulness and enjoyment.

All students, but one due to an injury, participated in physical fitness testing. Students in this charter school physical education program performed above the district norms for passing all fitness tests. Sixty percent (60%) of students in this study passed all Fitnessgram components, while only forty-nine percent (49%) of students in the same school district passed all components. Both of these data are above the California state percentage, which is thirty-nine percent (39%) (CDE, 2010).

Focus group interviews were audio-recorded and later transcribed for analysis. After analyzing the interviews, four main themes emerged: 1) We Don’t Have to do a Certain Thing!, 2) To Like or Not to Like, 3) Boring old fitness testing, and 4) Enthusiastic Teaching. Students reported choice as an enjoyable and meaningful experience during physical education. One student stated, “it makes it more interesting and fun”. Male students experienced negative attitude regarding the alteration of rules during games and sports. However, most students enjoyed competition in physical education and getting to learn new sports. Many of the interviewees described fitness testing as boring and routine. These students did not enjoy the testing, but understood the reasoning behind it. Nonetheless, students were able to be successful in fitness testing despite the displeasure factor. There were positive attitudes toward teacher enthusiasm.
Some students expressed the variety of undergraduate teachers to be fun and exciting while one student expressed that some of the undergraduate student teachers to be less experienced.

It was apparent that students in this study had a positive attitude towards physical education. These data are specific to this charter school physical education program during one eighteen week semester. This study initiates research on charter high school students and physical education. It is important to remember this was done with a select group of students in a unique program.

Conclusions

The following conclusions are presented about charter school student attitudes toward physical education using attitude surveys, fitness testing and select student’s focus group interviews.

1. Charter high school students, in this study, had a generally positive attitude toward physical education. Students enjoyed competition and variety of sports in physical education. Students felt physical education teachers made learning fun for them and the curriculum content was perceived as useful.

2. Charter high school students in this study perceived choice in physical education as a positive attribute to their experience. Students felt choice provided them with an opportunity to participate in activities and sports they were interested in.

3. Enthusiastic teachers, both lead teachers and undergraduate student teachers in physical education class positively influenced these charter school students’ attitudes
in this study, although not all students enjoyed being taught by the undergraduate teachers.

4. Participants in this study enjoyed competition in activities they were involved in (Ultimate Frisbee, football & soccer). However, some students experienced dissatisfaction when sport and games rules were modified to emphasize certain parts of the game or to involve all students.

5. Students in this study expressed fitness testing as an unfavorable experience. Nonetheless, students were able to overcome unenjoyment during fitness testing and performed at a high level. Students believed testing should be done using different assessments and test protocols should not limit a student’s maximum score.

Implications for Physical Education Teachers

The conclusions derived from this study hold several implications for physical education teachers, and university staff wishing to create nontraditional program for charter high school students. The results of this study indicated that these charter high school students were influenced by a variety of factors involved in physical education. Students expressed teacher enthusiasm, teachers’ ability to present material in an understanding way, enjoyment in activities and sports, curriculum development, and activity choices as importance factors influencing their attitudes towards physical education. When creating physical education curriculum it is important to incorporate these factors and others to provide students with the most developmentally appropriate learning experiences and activities (NASPE, 2009). It is also important to assess the class
for skill level and student interest. Students in this study expressed enjoyment in activities when taught correctly and when the teacher took a personal interest in the curriculum content. Some physical education programs may be repetitive and lack the mechanism to meet individual needs for the activity. Solomon (2003) suggests that attitudes may be influenced by family and previous experiences. This study was consistent with previous research which also suggested that program characteristics such as curriculum and teacher influence are determining factors of enjoyment and usefulness (Solomon, 2003). Participants in the study expressed curriculum choice as being an enjoyable experience in this physical education program. Physical educators might find it useful to receive input from students when developing curriculum to give students the opportunity to participate in activities they enjoy and find interesting (Condon & Collier, 2002). Physical educators might consider designing curriculum and instruction that meets the needs of all students, and offer an enthusiastic learning environment to model positive health and fitness habits.

Although this study took place in a rare physical education setting, it is important to understand that curriculum development can be implemented if teachers are willing to change. As all students and staff are different, educators must carefully evaluate their students and work with department faculty to identify strategies that will allow for student success and enjoyment. Success and enjoyment may help lead students to an active lifestyle and healthy future.
Recommendations for Future Research

Further research is imperative for understanding the attitudes of charter school student’s toward physical education. Studies involving a larger population would be useful in making inferences about charter school student’s attitudes toward physical education. This study included just one charter school and one physical education program taught by the researcher and undergraduate physical education majors from a state university. Thus, it is important for the reader to interpret the results only based on this sample.

With the number of charter schools in the United States and around the world increasing, charter school research needs to be conducted in various geographical locations and with a variety of populations. It would be helpful to identify attitude differences among genders and grade levels. Moreover, future researchers might want to examine students of low, medium and high skill level. Another research option would be to study charter school students in elementary settings about their attitudes toward physical education. To gain understanding among elementary student needs, it would be helpful to examine charter school students who have a physical education specialist and those who receive physical education from their classroom teacher. Understanding the various age differences could allow for the improvement of teaching methods and curriculum development for students.

Research comparing student attitudes in traditional and experimental physical education programs could be beneficial and would extend the research. Using a variety of educational settings would provide researchers with similarities and differences among
attitudes with students involved with various programs. It would be particularly interesting to evaluate parental and administrative attitudes toward the physical education program their students are participating in. With parental and administrative attitudes being compared to student attitudes, researchers could see potential differences and similarities from various levels of involvement in physical education.

The Student Attitude toward Physical Education Survey (Subramaniam & Silverman, 2000) is an effective tool, however, it would be important to adjust question 13 to read identical to the version presented in the validation of the tool. It would also be interesting to eliminate the ‘uncertain’ option on the survey and force students to make a decision about the statement. The Likert scale would then become a 1 to 4 scale (Strongly Disagree, Disagree, Agree, Strongly Agree).

This researcher believes it would be beneficial for the interviewer to be someone who knows high school students well and whom the students feel comfortable with. It is important to ask follow-up questions that allow for in depth responses. The researcher suggests that focus groups interviews be conducted at a time other than class time. This could help students feel as though they are not missing out on an activity and extend the time of the interview.

As the researcher was also the primary teacher, it would be important for future researchers to obtain information about class dynamics and personalities of students. Particularly during focus group interviews, the gathering information about these students would be helpful. It would be beneficial for the researcher to observe
classes to identify class dynamics to make their own inferences about students and the teacher.

This study is initiates research on charter school physical education student attitudes. There is room for further research in studying student attitudes toward physical education in various settings. The research community would benefit from more research conducted with different demographics and grade levels to understand student attitudes toward physical education.
REFERENCES


*Psychology in the Schools, 44*(8), 873-886.


APPENDIX A
Dear Parent or Guardian,

My name is Jenna Salz and I am a graduate student at California State University Chico in the Department of Kinesiology. For my Master’s thesis I will be conducting research on student attitudes in physical education. I am contacting you to receive permission for your son or daughter to participate in my data collection. During data collection your son or daughter will be participating in a survey and a focus group interview. Your son or daughter will be asked questions regarding his/her thoughts and attitudes about physical education classes at INSPIRE charter school. Responses to questions will not be associated specifically with your child and all answers will be anonymous. A graduate student colleague in the Department of Kinesiology will ask focus group interview questions as to help make students feel comfortable. Interviews will then be recorded and transcriptions will be made to interpret responses. There is no right or wrong answer to the questions and your son or daughters’ grade will not be affected based on their participation or non-participation in the study.

By participating in the study your son or daughter will help teachers understand how attitudes affect physical education classes and students desire to learn. Student participation is voluntary. Your son or daughter will be unable to participate in the research without your written permission. Talking about attitudes towards physical education may become uncomfortable for your son or daughter; therefore, if at any time during the study your son or daughter feels uncomfortable with answering questions they may withdraw from the study without penalty. If you should have any other questions regarding the study please contact me by phone (530-228-6964) or email (JennaSalz@gmail.com)

Thank you for your support and help.

Sincerely,
Jenna Salz

Detach and return

I ______________________________ give permission for ________________________
(Parent or Guardian name) (Child’s Name)

I understand that participation is voluntary and my son or daughter may withdraw at any time during the study without penalty.

________________________________________________________
Parent or Guardian Signature                     Date
Dear Student,

You are being asked to participate in a study about your attitudes toward physical education and the program that you are involved in at Chico State. You will be asked to take a short survey about your attitudes. Some students will be asked to participate in a focus group interview to talk more about attitudes toward the program and physical education in general.

You do not need to worry about your name being disclosed to others and your grade in this program will NOT be affected by your responses or participation. Your participation is voluntary. Talking or answering questions about your attitudes towards physical education may become uncomfortable for you, therefore you may withdraw from the study at any time without penalty. Please let me or the interviewer know if you do not wish to complete the study.

If you have any questions during the survey please ask. Another graduate student in the Kinesiology department will administer the survey and conduct the interview. Please do not let this affect how you answer the questions. It is very helpful that you answer all parts of the questionnaire and interview, honestly and to the best of your ability.

Your participation in this study is helpful to research in physical education. By completing this study you will help the researcher and possibly other teachers understand student attitudes towards physical education, choices in physical education and Fitnessgram testing.

By signing below you are confirming that you understand what is being asked of you during the study. Again, if you wish to withdraw at any point please tell me or the interviewer.

Thank you,

Jenna Salz

_________________________
Student name

__________________________
Student Signature

________________________
Date
APPENDIX C
STUDENT ATTITUDE TOWARD PHYSICAL EDUCATION SURVEY


The purpose of this survey is to understand your feelings toward physical education. Please read the items and rate how you feel about each statement.

**DIRECTIONS:**

1. Please read each statement carefully before answering.

2. This is not a test. There are no “right” or “wrong” answers to any of the sentences. Just answer as honestly as you can.

3. Circle One number for each sentence that best describes your feelings toward physical education in your school. You should answer according to the numbers listed below.

   5= Strongly agree  
   4= Agree  
   3= Uncertain  
   2= Disagree  
   1= Strongly disagree

4. Please answer all statements

<table>
<thead>
<tr>
<th></th>
<th>5 = Strongly agree</th>
<th>1=Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. The activities I learn in physical education make my physical education class interesting for me.</td>
<td>5 4 3 2 1</td>
<td></td>
</tr>
<tr>
<td>2. The activities I learn in my physical education class make learning unpleasant for me.</td>
<td>5 4 3 2 1</td>
<td></td>
</tr>
<tr>
<td>3. The activities I learn in my physical education class get me excited about physical education.</td>
<td>5 4 3 2 1</td>
<td></td>
</tr>
<tr>
<td>4. My physical education teacher makes my physical education class seem unimportant to me.</td>
<td>5 4 3 2 1</td>
<td></td>
</tr>
<tr>
<td>5. I feel the activities I learn in physical education make my physical education class un-enjoyable for me.</td>
<td>5 4 3 2 1</td>
<td></td>
</tr>
</tbody>
</table>
6. I feel the activities I learn in my physical education class are useless to me.  
   5 = Strongly agree 1= Strongly disagree
   5 4 3 2 1

7. The activities I learn in my physical education class seem important to me.  
   5 4 3 2 1

8. My physical education teacher makes my physical education class seem important to me.  
   5 4 3 2 1

9. My physical education teacher makes my physical education class interesting for me.  
   5 4 3 2 1

10. The activities I learn in my physical education class are useful to me.  
    5 4 3 2 1

11. I feel my physical education teacher makes learning in my physical education class fun for me.  
    5 4 3 2 1

12. I feel my physical education teacher makes my physical education class unenjoyable for me.  
    5 4 3 2 1

13. I feel the activities I learn my physical education class seem unimportant to me.  
    5 4 3 2 1

14. The activities I learn in my physical education class seem unimportant to me.  
    5 4 3 2 1

15. My physical education teacher makes my physical education class useful for me.  
    5 4 3 2 1

16. I feel my physical education teacher makes learning in my physical education class valuable for me.  
    5 4 3 2 1

17. I feel my physical education teacher makes my physical education class valuable for me.  
    5 4 3 2 1

18. I feel my physical education teacher makes learning in my physical education class useless for me.  
    5 4 3 2 1

19. My physical education teacher gets me excited about physical education.  
    5 4 3 2 1

20. I feel the activities I learn in my physical education class make learning fun for me.  
    5 4 3 2 1
FOCUS GROUP INTERVIEW QUESTIONS

1) Talk to me about your physical education class. Describe a typical day.

2) What makes physical education interesting for you?

3) What gets you excited about physical education?

4) What makes physical education important for you?

5) What do you find enjoyable about physical education class?

6) What do you dislike about physical education class?

7) How does your physical education teacher make class fun?

8) Does your physical education teacher make your time spent in class worthwhile?
   How so?

9) Tell me how you feel about choices in physical education class.

10) Does having choices in physical education make it more meaningful for you?
    How so?

11) What is boring and routine about physical education?

12) What is not fun about physical education class?

13) How do you feel about the fitness-gram testing?