PRESERVICE CLASSROOM TEACHERS—BELIEFS AND PERCEPTIONS

CONCERNING ELEMENTARY PHYSICAL EDUCATION

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Master of Arts
in
Kinesiology

by
Vickie Laree Lourenco 2009
Spring 2009
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ABSTRACT

PRESERVICE CLASSROOM TEACHERS' BELIEFS AND PERCEPTIONS CONCERNING ELEMENTARY PHYSICAL EDUCATION

by

Vickie Laree Lourenco 2009

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The purpose of this study was to examine the beliefs and perceptions of preservice elementary classroom teachers concerning elementary physical education. The study involved 190 participants. Quantitative and qualitative data were collected using a school subject ranking scale and a pre- and post-survey. Frequencies, percentages, mean scores, and t-tests were calculated to describe the participants' responses. Statistically significant differences were found when examining the school subject ranking scale and the pre- and post-survey questionnaire results. The participants' open-ended responses on the surveys were transcribed and analyzed and six positive, and five negative themes emerged from the open-ended question with YES responses through inductive analysis, and five themes emerged from the open-ended question with NO responses through inductive analysis. The themes that described the participants' positive experiences in
physical education as a child included: enjoyment in athletics, being successful, learning new things, a break from the classroom setting, teamwork, and positive interaction with the teacher. The themes that described the participants' negative experiences in physical education as a child included: being spotlighted, captains picking teams, no instruction, large class size/waiting in line, and too competitive. The results of the study found that after a 15 week methods course on elementary physical education that the participants' beliefs and perceptions concerning the importance of physical education had the greatest change when compared to the other school subjects. The results also indicated that the participants believed that physical education is an integral part of school education, provides opportunities to learn about fitness, is not just about playing games and sports, and is not just a time to be with friends, laugh and be silly. The results from this study also suggest that preservice teachers believed that physical education deserves a lot more credit than it is currently given. Further research in this area is necessary to continue to investigate the importance of preservice physical education methodology courses, and to uncover if the beliefs and perceptions of the participants change (and are sustained over time.)
CHAPTER I

INTRODUCTION

Physical education is a school subject that is often overlooked in the education system. Many teachers, students, parents, and administrators often view it as a non-academic subject. It is sometimes perceived as supervised recess, and some teachers believe it is a time for children to release energy outside of the traditional classroom setting and get away from their busy academic day. The current emphasis on assessment and academic testing in core subjects has minimized the importance of physical education and holistic learning for children. Some experts feel that a child without physical education, music, and art is a disadvantaged child (Coleman, 1999; Lambert, 2000; National Association for Sport and Physical Education (NASPE, 2004; NASPE, 2006; Perrin, 1994; Straub, 1994; Winner & Hetland, 2001).

The Shape of the Nation Report (2006) outlines the status of physical education in the United States and reports relevant information to the public about current trends in each state. The report revealed that 95% of parents nationwide disclosed that physical education should be included in the school curriculum for all students in kindergarten through grade twelve. Eighty five percent of parents and 81% of teachers believed that students should be required to take physical education every day at every grade level, and 92% of teens stated that they should receive physical education on a
daily basis. More than 75% of parents and teachers believed that school boards should not eliminate physical education for budgetary reasons or because of the need to meet stricter academic standards.

According to the National Association for Sport and Physical Education (NASPE, 2004) the main purpose of physical education is to help children learn to achieve and maintain a health-enhancing level of physical fitness and to promote the importance of physical activity for life. NASPE defines quality physical education as: the ability to help all students develop health-related fitness, physical competence, cognitive understanding, and positive attitudes toward physical activity so that they can adopt healthy and physically active lifestyles.

The California Content Standards (2006) state that physical education is a multifaceted process that teaches a wide range of skills and activities with the aim of helping students becoming physically educated, physically fit, able to enjoy a wide variety of physical activities, and make a commitment to lifelong health and physical well-being. In the state of California, physical education is a required school subject. However, individual districts are able to exempt high school students from physical education for any two years in grades 10 through 12. In California there is no set student to teacher ratio or class restrictions and no state required cognitive assessment for the subject physical education. California does require school districts to administer the FITNESSGRAM in grades 5, 7 and 9 which is an assessment used to measure students overall physical fitness level. There is no state comprehensive exam required in physical education for graduation (NASPE, 2006).
According to Hedley et al. (2006) the percentage of young people who are overweight has more than tripled since 1980. Among children and teens aged 16-19 years, 16 percent are overweight. About 10% of children age 2 to 5 years are overweight (Ogden, Flegal, Carrol & Johnson, 2002). Approximately 60% of obese children, ages 5 to 10 years, have at least one cardiovascular disease risk factor, such as elevated total cholesterol, triglycerides, insulin or blood pressure, and 25% have two or more factors (Freedman, Khan, Dietz, Srinivason, & Berenson, 2001).

According to the Center for Disease Control (CDC) and Prevention (2007), the percentage of high school students who attended daily physical education classes decreased from 42% in 1991 to 25% in 1995 and has remained stable until 2007. The research states that the time students spend being active in physical education classes is decreasing. Among high school students enrolled in physical education classes, the percentage who were active for at least 20 minutes during an average class dropped from 81% in 1991 to 70% in 1995.

With childhood obesity in the United States on a rise it is important to educate children on ways in which they can engage in physical activity so they will continue to stay active for life. Helping children establish healthy habits at an early age will hopefully help them learn to implement physical activity into their daily routine and continue this physical activity throughout adolescence and ultimately into adulthood.

Elementary classroom teachers are typically responsible for building the foundation for motor skill development and fitness knowledge in physical education class. Research states that positive and negative experiences in physical education have a
direct impact on children. According to Graham (2008) elementary school educators are
to provide positive experiences in the classroom no matter what subject area they may be
teaching. As the importance of elementary physical education continues to be researched
it is important for adults and classroom teachers to focus on helping children develop
positive attitudes and perceptions about their physical skills in hopes that they will
remain physically active in the future. Fox and Biddle (1988) stated that in order for
students to continue to be physically active for the rest of their lives, they must have
positive experiences in their early encounters with physical activity, which for many
children will occur primarily in elementary physical education. Carlson (1995) suggested
that failure in physical education class or negative experiences may lead to
discontinuation of physical activity especially for students who are low achieving. She
also reports that physical education students actively influence the learning environment,
and the results of their perceptions can either help or hinder the success of the curriculum.

Many students’ first experiences with physical activity, or any kind of motor
skill development, will come from their classroom teacher, or if fortunate enough, from a
qualified physical education specialist. Rink and Hall (2008) asserted that an effective
physical education program aims at helping children becoming physically active for life
and that effective classroom teachers have clear intentions to promote the outcomes, and
know the pedagogical steps regardless of the subject matter they teach. According to
Graber, Locke, Lambdin, and Solmon (2008) the time frame in which children progress
through a series of developmental stages, during which their capacity for learning motor
skills is at its maximum, is critical during the elementary school years. Furthermore,
without effective instruction many students will not be able to reach their peak in terms of acquiring mature motor skill development.

The professional career patterns that teachers follow begin long before their entrance into preservice teacher education programs (Allison, Pissanos, & Sakola, 1990; Britzman, 1986; Houle, 1980; Lortie, 1975.) Beliefs are often derived from personal experiences. Understanding preservice teacher= beliefs about physical education demonstrates that the beliefs held by teachers influence their perceptions of education, instructional behaviors, and student learning outcomes (Xiang, Lowry, & McBride, 2002). The importance of teachers= beliefs concerning educational subject matter has been addressed in research on teaching and teacher education (Calderhead, 1996; Clark and Peterson, 1986; Ennis, 1996; Ernest, 1989).

**Research Question**

Do preservice teachers beliefs and perceptions concerning elementary physical education change after taking a required introductory methods course in children= physical education? Sub questions include: What are preservice teacher= initial and concluding beliefs about elementary school physical education following a fifteen week course? How do preservice teachers rank, in order of importance, ten different school subject areas including physical education? What are preservice teacher= beliefs and perceptions about the contribution of physical education to the development of the whole child? Is physical education an integral part of school education, does it provide opportunities for children to learn about health and fitness, motor skill development and
social development?

Statement of Purpose

The purpose of this study was to examine the beliefs and perceptions of preservice elementary classroom teachers concerning elementary physical education. The focus of this study was to examine whether or not preservice educators’ beliefs changed after completing a course in which they learned appropriate knowledge and methods for implementing quality physical education. The results for elementary educators are to realize the importance of implementing a developmentally appropriate physical education program into their curriculum. Graham (2008) stressed,

> As the importance of physical activity for healthy living continues to be documented, it seems logical to expect adults to assign ever greater importance to helping children develop positive attitudes and perceptions about their physical abilities with the hope that they will become and remain physically active for a lifetime. (p. 247)

Assumptions

While conducting the study several assumptions were made. It was assumed that all participants were honest in responding to the rankings of the school subjects, answering the Likert Scale questionnaire, and responding to the open-ended questions. It was also assumed that all of the instructors who taught the undergraduate course followed a similar format.
Delimitations

Based on the methodology of this study, the following delimitations were identified:

1. This study was delimited to 34 male and 156 female Liberal Studies /Child Development majors attending a State University in northern California, and enrolled in the Foundations of Childhood Physical Education course in the fall of 2003.

2. The study was delimited to those participants who signed a consent form to participate and who voluntarily took the questionnaire and completely finished the study including pre- and post-testing.

3. This study was delimited to the participants enrolled in one of eight sections in which the instructors included either peer teaching or micro teaching into their curriculum.

4. This study was delimited to four full time professors who taught the class and one graduate student instructor whom are all highly qualified to teach within the department of Kinesiology and Physical Education.

5. This study was delimited to the students whose instructors required the textbook by Graham, Holt/Hale and Parker (2003) *Children Moving: A reflective approach to teaching physical education*.

Limitations

Based on the methodology of this study, there were two items that were beyond the control of the researcher in the study.
1. Prior personal experiences from elementary or secondary physical education might have influenced the participant’s perceptions about elementary physical education.

2. The participant’s motivations and readiness to be surveyed could have influenced their perceptions.

Significance

Allison, Pissanos, and Sakola (1990) determined that previous physical education experiences, not college training, were important for forming classroom teachers' ideas of what physical education is. Nevertheless, these researchers suggested that preservice teachers’ reflections about early childhood experiences may help them understand the need for a developmentally appropriate physical education curriculum. Sonnenburg (1992) disclosed that additional college courses are ways to educate teachers and that many factors such as length of in-service training, the principal’s support and involvement in the new material, interest in the topic, years of teaching experience, and on going training all have an impact on in-service education that is passed down to classroom teachers. However, studies by Graber and Schempp (2001), Hart (2005), and Humphries and Ashy (2002) tell us that these courses are important. Xiang et al. (2002), offer:

Examining preservice classroom teachers' beliefs about elementary physical education, then may shed light on how they view elementary physical education as well as their willingness to (a) teach elementary physical education, (b) support physical education programs at their schools, and (c) promote the integration of physical education into their teaching when it is time for them to make choices on
these issues. With this knowledge, physical education teacher educators, through their methods courses may better be able to prepare preservice classroom teachers and influence them to physical education advocates. (p. 147)

Conversely, Graber, Locke, Lombdin, and Solmon (2008) expressed that unlike physical education teachers, most classroom specialists exposure to only one course, related to teaching the content of physical education, is hardly sufficient enough to prepare them to instruct a complex subject in a dynamic environment such as physical education.

Definition of Terms

The following terms were used throughout the study. These definitions were provided to ensure that the terms are used correctly, and that the reader has complete understanding.

C Beliefs: Attitudes and values about teaching, students, and the education process that students bring to teacher education (Pajares, 1993).

C Classroom Teacher: A teacher who is specifically trained in multifaceted academic areas to include physical education.

C Developmentally appropriate: Taking into account the fact that developmental change in children and youth is qualitative, sequential, directional, cumulative, multifaceted, and individual. (NASPE, 2006)

C Liberal Studies Majors: Students who follow a specific advising pattern that meet the requirements of the California credential program in elementary education.

C Perceptions: Thoughts, beliefs, and feelings about persons, situations, and
events. (Schunk, 1992)

C Physical education specialist: Teachers who are educated in the field of physical education or kinesiology and have completed college course work to become a K-12 physical education teacher.

C Quality physical education: instructionally and developmentally appropriate physical education for all students being served (NASPE, 2006).
CHAPTER II

REVIEW OF LITERATURE

The review of literature is divided into five main sections. The first section includes a brief review of teacher socialization including: teacher beliefs and perceptions about teaching and education. This includes how teacher beliefs are formed and molded by previous experiences. Second, studies are included that pertain to preservice classroom teachers. The third section includes studies of preservice physical educators. The fourth section includes comparison studies of physical education specialists and classroom teachers. The fifth and final section includes research related to the impact of professional development and in-service training teachers. This chapter concludes with a brief summary of the literature.

Teacher Beliefs, Perceptions, and Socialization

Preservice teachers beliefs are defined as the attitudes and values about teaching, students, and the educational process. These attitudes and values can be inferred by teacher educators not only from what preservice teachers say but from what they do (Pajares, 1993). Pajares stated that, The process of accommodating new information and beliefs is gradual, one of taking initial steps, accepting and rejecting certain ideas,
modifying existing beliefs, and finally adopting new beliefs (p. 46). It is said that even during the student teaching experiences the pre-service educators often drift back to their past, with their preconceptions on the way things were taught to them, often forgetting the methods they have learned in higher education (Brockhart & Freeman, 1992).

Placek et al. (1995) studied the physical education backgrounds and beliefs of 476 recruits who indicated that their occupational choice included the areas of teaching and coaching. A 51-item questionnaire was used to provide information about how the different aspects of socialization affected physical education majors. The questions answered by the recruits were categorized into four different groups: a) Personal Attributes, b) Background in Sport, c) Background in Physical Education, and d) Career Choices. Also open-ended questionnaire responses were used to analyze the individual recruit's beliefs about the purpose of physical education. The responses from the open-ended questions about the purpose of physical education were coded and categorized into nine subcategories which included: 1) Learn Skills/Activities, 2) Name of Activity/Sport or Basic Skill, 3) Physical Fitness Activity/Knowledge, 4) Social Interaction/Personal Development, 5) Participation, 6) Fun/Enjoyment, 7) Cognitive Knowledge, 8) Valuing Physical Education, 9) Break/Recreation. The results from the study indicated that 65% of the recruits attended schools in which individuals were excused from the regular physical education class if they participated in athletics. At the elementary school level 30% percent of the recruits indicated that the purpose of physical education was to learn skills and activities. Fifteen percent of the recruits revealed the main goal of physical education was to understand the activity/sport and indicate the
basic skills needed for that activity. Thirteen percent of the recruits indicated that the purpose of physical education at the elementary level was for fun and enjoyment for the children. Regarding middle school physical education thirty-one percent of recruits indicated that the purpose of physical education at the middle school level was to learn skills/activities. Twenty percent thought the main purpose at the middle school level was to identify the activity/sport and indicate what basic skills are needed for that activity. Twelve percent stated that the main goal for physical education was to promote social interaction and personal development and the other twelve percent stated the main purpose was to emphasis and promote physical fitness. Twenty-one percent of the recruits indicated that the purpose of physical education at the high school level was to understand the activity/sport and indicate what basic skills are needed for that activity. Seventeen percent reported that the main purpose of physical education at the high school level was to learn skills/activities. Eleven percent reported that the main objective at the high school level was to emphasis and promote physical fitness. The results from this study indicated that the recruits socialization, physical education experiences, athletic experiences, and background in physical education may have influenced their beliefs about the purpose of physical education at the various grade levels.

Hutchinson and Buschner (1996) completed a study on delayed entry undergraduates in a physical education teacher education program. This study examined life experiences and career choices of individuals that decided to return to school to make a career change. The purpose of this study was to describe two aspects of the life experiences for two delayed entry undergraduates who identified physical education
teaching as a career path, and who were actively enrolled in a university physical education teacher education (PETE) program. This study had two participants, one female and one male, both around the age of thirty. Each participant completed three, 90-minute interviews. Each interview pertained to one aspect of the phenomenological process: (a) life history, (b) details of their experiences, and (c) meanings derived from their experiences. One open-ended question was the focus of each 90-minute interview. The results indicated that regardless of age, the individuals' prior experiences strongly influenced their career choices and understanding and reflecting upon ones youth can help all individuals in making career decisions.

Matanin and Collier (2003) studied the belief system of three preservice educators, two females and one male who were going through a four year teacher preparation program. The researchers used open-ended interview questions, analyzed personal teaching philosophies, critiqued non-graded course assignments and analyzed critical reflections to gather data. Prior to program entry the preservice educators completed a questionnaire that contained 6 open-ended questions that were related to teaching physical education. The researchers used five pre-structured categories to make meaning of the data. They included: the purpose of physical education, characteristics of a good physical education teacher, classroom management, planning and instruction, and assessment. The findings of the research indicated that the participants’ personal biographies had a significant impact on their personal philosophies about teaching physical education, teacher effectiveness, and planning. The data also revealed that the subjects’ personal experiences also played a considerable role and helped shape their
beliefs about teaching physical education to children. None of the participants adopted the school’s philosophy about assessment within the content area of physical education. The participants’ beliefs about grading on active participation could be traced back to their personal experiences as students in physical education classes.

Preservice Classroom Teachers

Allison, Pissanos, and Sakola (1990) studied the biographies of 120 elementary classroom teachers enrolled in a 3-hour physical education methods course. The participants consisted of 113 females and 7 males. The subjects were asked to report, in anecdotal form, their most memorable elementary physical education experience including the grade level, the setting, how they felt about the experience, and why it was memorable. The anecdotes were then inductively analyzed to identify common characteristics. The characteristics included six categories: success, embarrassment, physical injury, gender equity, special events and equipment, and teachers. After the anecdotes were analyzed, both positive and negative memories were drawn from the institutional biographies. Many portrayed the preservice classroom teacher as having negative experiences within the physical education setting and these negative experiences were vivid and remained with these individuals over time. Some of the negative experiences expressed were: teacher being overly strict, individual embarrassment within the class, personal injury, forced to do activities that they did not feel comfortable doing, and the teacher not taking control about teasing and giggling when individuals were unsuccessful with different skills. Although most anecdotes tended to be on the negative
side very few positive anecdotes were shared. The positive experiences expressed included: the classroom teacher as helper, special recognition or awards, and special events (Olympics) in physical education. These researchers suggested that by helping students take a serious look at their histories, they may be able to clearly make better choices about the experiences they will design and conduct for their students.

Faulkner and Reeves (2000) studied female primary school student teachers self-perceptions and attitudes toward teaching physical fitness in the classroom setting. The 116 participants that took part in the study were all in their final year of undergraduate primary education studies. Three instruments were used in this research to collect data. The first instrument used was to measure physical self perceptions and attitudes toward teaching physical education (Fox & Biddle, 1988). This instrument included 30 items that were subdivided into five different scales (6 items each) assessing Global Physical Self-Worth and the four sub domains of Physical Self Worth: Attractive Body (BODY), Physical Condition (COND), Sport Competence (SPORT), and Physical Strength (STREN). The second instrument that was developed and used was the Perceived Importance Profile (PIP). The third instrument utilized in this study was the Attitude to Teaching Physical Education (ATTPE), which included a scale consisting of three questions in which responses were rated on a five point Likert Scale. The results from this study indicated that positive attitudes toward teaching physical education were related to a higher self perception of competence in the four sub areas of: BODY, COND, SPORT, STREN, and the importance ratings from the Perceived Importance Profile (PIP) regarding attitudes toward teaching physical education were related to the importance
attached to each physical subscale. The results also revealed that individuals that perceived themselves to be more competent at sport were more likely to have had successful sporting experiences.

Graber and Schempp (2001) published a case study on a professor that taught a methods course on physical education for children at the secondary level. The professor that was critiqued was considered a generalist teacher. Seventeen out of the 22 students enrolled in the methods course agreed to take part in the study. The 12 males, 5 females, and the professor contributed to data collection by: (a) non-participant observations, (b) formal interviews, (c) informal interviews, and (d) document analysis. The purpose of the study was two-folded. First it examined the biography of one individual teacher educator, and the second part was to see how the course impacted perspective teacher educators. After the researchers attended the class regularly, analyzed the data, transcribed the interviews, participated in formal and informal interviews with the students enrolled in the methods class, and interviewed the professor who taught the methods class many conclusions were made. The first finding concluded that past experiences and current beliefs do impact the pedagogical practices of the teacher. Secondly, the highly demanding responsibilities outside of the methods class had limited the professor’s ability to plan and conduct class in a way she would have liked to. Third, the students enrolled in the professors methods class, enjoyed her caring mother-like personality, compassion, and sharing of personal experiences, but believed her lectures regarding content were quite boring, and that the methods class had little impact regarding their ability to teach physical education. Lastly, the research concluded that the professors lack of training and
experience regarding elementary physical education content may have explained the limited course impact on the students enrolled in the methods course.

Humphries and Ashy (2002) studied the content of physical education methods courses for elementary education majors within the United States. Two-hundred surveys were mailed out to various physical education programs at NCATE accredited universities. The surveys contained 20 questions related to the nature of physical education methods courses. Out of the 134 respondents, 81% of the universities taught a physical education methods course for children. Eighty-six percent of the universities required the preservice teachers to take the methods course and 56% of the courses were 3-units/hours. Of the methods courses taught 62% of the courses required contact with children. Thirty-four of the methods courses included peer teaching only and five of the methods courses did not require any teaching at all. The results from the surveys found that 67% of the methods courses included field experiences, and that a majority of the courses had their students do self assessments or reflective assignments related to their field experiences. The authors of this study conveyed the importance of a quality structured physical education program and emphasized the importance of implementing structured field experiences to help future classroom teachers develop their pedagogical and classroom management skills related directly to the content of physical education.

Xiang et al. (2002) studied 97 participants who were enrolled in a physical education methods course. The participants were elementary education majors enrolled in five different physical education methods classes. Ninety-two of the participants were female while the other five were males. The participants took a pre-test questionnaire at
the beginning of a fifteen-week long methods course and followed with a post-questionnaire. The participants had a mean range of 21 years. Fifteen of the participants were seniors, 60 juniors, and 22 were sophomores. All of the participants were caucasian except for two. The purpose of this study was to focus on the preservice teachers’ beliefs and outcomes after taking a physical education methods course. The study concluded: 1) that the methods course had a positive impact on the teacher’s beliefs about physical education, however no impact on their on their disposition toward teaching elementary physical education. 2) The inductive analysis on the pre-and post-test responses had a significant increase for all of the questions related to developmentally appropriate physical education. Initially on the pre-test 9% of the participants believed that physical education helps the development of the whole child. The post-test revealed that 42% of the participants believed that physical education helps the development of the whole child. Regarding the question that physical education was a fun break from the traditional classroom setting, 19% of the participants agreed with that statement on the pre-test. However, on the post-test the percentage decreased to 16%. The decline of this question was valuable information, letting researchers know that following a methods course, preservice educators understood that physical education is not just a "fun break from school activities," and that it is an important subject for children.

Faulkner, Reeves, and Chedzoy (2004) investigated the theory of planned behavior in predicting non specialists, preservice classroom teachers’ intentions to teach physical education for two hours per week throughout the whole school year. The participants in the study were 128 preservice classroom teachers that were in their final
year of the teaching training program. The 117 females and 11 males completed a cross-sectional survey and a questionnaire that asked the participants to report their gender, age, and ethnicity. The survey also included six questions derived from the theory of planned behavior (TBH), which was a tool that helped the researcher analyze the degree to which an individual feels that their performance is under his or her control. The TBH survey included questions in which 1 represented (very unlikely) to 7 which represented (very likely) to the following seven variables: intention, attitude, subjective norms, perceived behavioral control, self-efficacy, identity, and past behavior. The survey also asked the participants seven questions related to the confidence they have to overcome different obstacles that may arise that could inhibit their teaching abilities. These questions were measured on a 5 point Likert Scale in which (1=not at all limiting effect to 5=very limiting effect). The 7 barriers included; lack of space, lack of equipment, lack of time, bad weather, lack of confidence, lack of student interest, and lack of timing. The results from the study indicated that 77 participants responded very likely or likely, and 51 responded unlikely or unsure to the statement, "I intend to teach physical education for two hours per week throughout the next school year." The intenders and non-intenders were divided up and analyzed by the seven different variables mentioned above. The biggest difference amongst the intenders versus non-intenders was their perceived behavior control. The result from the behavior analysis indicated that time was the most limiting barrier for both the intenders and non-intenders. The results also indicated that the intenders were much more confident to overcome obstacles and the non-intenders generally reported all barriers as being more limiting.
Hart (2005) assessed the impact a methods course on the knowledge of elementary education majors in the area of fundamental movement skills. Thirty-three students were used as a control group and did not take the physical education methods class. This control group took a health methods course. There were sixty-five students that were used as the experimental class and were enrolled in a physical education methods course for children. Twenty students were enrolled in a full semester class and forty-five students were enrolled in a half a semester long course that taught developmentally appropriate physical education practices for children. The two methods courses were similarly taught, except that the full semester course included additional field experiences.

Students in all three methods courses, rather it be the health methods course or the full or half a semester course in physical education, were asked to complete an open ended questionnaire on the first day of instruction that asked the students to describe why fundamental movement skills were important, and to list as many fundamental skills as possible. On the last day of all these courses, students were asked to fill out the same questionnaire given on the first day of instruction.

The results from this study revealed that when comparing the data from the pre- and post-survey questionnaire, that the students enrolled in the physical education methods courses were able to list more and identify correctly more fundamental skills than the students enrolled in the health methods course. As a result, this study validated that a physical education methods course may have an important and positive impact on the knowledge on gains regarding fundamental movement and skill development.
Tsangaridou (2005) explored classroom teachers’ reflections on teaching physical education. The focus of the study was to understand the reflection process that classroom teachers gain during their student teaching. Two preservice classroom teachers volunteered to participate in the study. Data were gathered through observations, journals, documents, and interviews that were analyzed inductively. The researcher categorized the data into four major themes which included: (a) the role of reflection, (b) reflection in action and reflection on action, (c) agency for change in teaching practice, and (d) nature and focus of reflection. The results indicated that the preservice teachers considered reflection a necessity in teaching; however the preservice teachers also noted that reflection is also a difficult and complex task due to their lack of knowledge related to context, content, or students. Findings also revealed that the preservice teachers tended to modify their written lesson plans when needed to adapt to the progress of the students or to make necessary changes when needed to make physical education experiences more meaningful for their students. After the journals were analyzed, the researcher concluded that the preservice teachers tended to reflect more on the positive events that occurred throughout their teaching experiences rather than the negative events that may have occurred. The results from this study support previous research that indicates the importance of reflection as an important element of the teaching process.

Preservice Physical Educators

Lowell Dansby (2000), studied the impact a 16-week course on skills and techniques of movement, exercise and fitness (STMEF) may have on preservice physical
education major attitudes toward movement education. The participants consisted of 152 individuals and used a four-group experiment. The two experimental groups consisted of 76 individuals that were enrolled in the course for physical education majors. The gender distribution consisted of 16 females and 60 males for the experimental group. The control groups consisted of 24 females and 52 males, whom were all physical education majors enrolled in the physical education teacher education program, but had not completed the course on (STMEF) for children.

The study consisted of a pretest to groups one and two, followed by groups two and three as participants enrolled in the 16-week course. The experiment concluded with all four groups completing a post-test questionnaire. The questionnaire was comprised of nine statements to collect demographic information, and 30 statements representing and referring to individual expression and attitudes toward movement education. The 5-point Likert Scale was used to measure the responses of the individuals. The results of this study concluded that exposure to a semester long course in movement education can foster positive attitudinal shifts to the targeted population.

Keating, Silverman, and Kulinna (2002) studied preservice physical education teachers attitudes toward fitness testing in the schools. A total of 611 preservice teachers took part in the study from ten different state universities. There were 370 male and 241 females that took part in the study. A survey was the instrument used to gather data to measure the preservice teacher attitudes toward fitness testing. The survey correctly. The survey included: the participants age, gender, year at the university, professional associations involved in, personal experiences participating in physical
fitness tests, specific physical fitness tests that they took part in, and the nature of their personal experiences with physical fitness testing. The instrument also included 16 questions that were related to the affective and cognitive components of attitudes. To avoid participation bias both positive and negative questions were included on the Likert Scale to measure participant attitudes. The results indicated that preservice teachers attitudes toward fitness testing were only slightly positive based on a seven point Likert Scale (4.8) in which (1) represented strongly disagree and (7) represented strongly agree. The attitudes among gender were similar and there were no significant differences among attitudes between the participants age. The results also found that enjoyable previous experiences in taking fitness tests were found to be an influential factor in preservice teachers attitudes, also those that indicated they had positive experiences with fitness testing also had a higher affect toward fitness tests. The Likert Scale also revealed that preservice teachers did not perceive fitness tests to be highly important or useful (4.82) and teachers were not fond of the tests (4.78). Overall, the study concluded that positive previous experiences with fitness tests may have had an impact on the attitudes preservice teachers may have when it comes to the importance of fitness testing in the physical education setting. Finally, the researchers stated that providing preservice teachers with positive experiences with fitness tests may help foster positive attitudes in children.

Barney and Pleban (2006) examined the perceptions held by preservice teachers before and after participation in a semester-long practicum course which included a 15-week physical education teaching experience in the public schools. There
were a total of 20 pre-service physical educators that voluntarily participated in the study. There were 9 females and 11 males, and all the students were required to take the 15-week physical education practicum course as part of graduation requirement. During the study participants were interviewed one week prior to their first day of their class, and then again one week after the completion of their practicum experience. Data were collected through: 1) student observation, 2) researcher observation, and 3) teacher feedback to support pre- and post-interview data. The interviews included 13 open-ended questions, in which the interviewee responses were transcribed and developed into common themes. The four resulting themes were: 1) classroom management, 2) classroom preparedness, 3) student learning, and 4) making physical education an enjoyable experience. The qualitative data collected were used to understand factors, fears, and concerns that preservice educators may have about teaching physical education. The researchers found that the responses from the open-ended interview questions will help future physical education teachers and education professors to better prepare future physical educators for real life teaching experiences.

**Comparison of Physical Education Specialists and Classroom Teachers**

Placek and Randall (1986) examined the Academic Learning Time (ALT) of students in engaged during a physical education class taught by classroom teachers versus those taught by physical education specialists. The purpose was to see if the results of (ALT) had a significant difference among students taught by specialist versus those
taught by classroom teachers. The data set included seven physical education specialists and thirteen classroom teachers. Each teacher was observed three times for thirty minutes. Observers randomly selected three students in the classroom. The three students were coded using a 6-second observe, 6-second record interval. The series would then move onto student two, then three. The sequence would repeat itself for the thirty-minute duration. The observers’ intervals were cued by a prerecorded audiotape.

The results of the study demonstrated low levels of academic learning time. The specialists devoted 31% of their time to general content whereas the classroom teachers spent approximately 27% of their time in this category. However, the results indicated that physical education specialists teaching practices were more developmentally appropriate compared to the non-specialist. The specialist’s lessons were designed to develop skills rather than games in which the teacher supervised but rarely intervened or gave feedback to the students. The students taught by specialists had 37% of time for skill practice development and 14% of the time for games, whereas the classroom teachers only spent 26% of their time on skills, and 40% of the time allotted for games. Also, the classroom teachers' students tended to spend more time waiting in line and for directions (15%) than those taught by specialists (11%).

Faucette and Patterson (1990) studied the effectiveness of eleven teachers during physical education lessons. Four of the teachers were physical education specialists, and seven were multiple subject general education classroom teachers. These subjects were observed over a 3-month period. The subjects taught either a fourth or fifth grade class consisting of approximately 27-32 students. Both schools had similar indoor
and outdoor facilities. However, the schools with the physical education specialists tended to have more equipment and specialized apparatus. The physical education specialist taught on a consistent schedule that included daily classes for approximately 40 minutes, whereas the classroom teachers physical education time was randomly organized throughout the day. The specialists taught activity units whereas the non-specialists had a smorgasbord approach to teaching physical education, which consisted of random games, physical activities, and that had no skill progression.

All of the teachers were observed using the Teacher Observation Schedule (TOS) developed by Rushall (1977). The TOS instrument was used to examine seven primary teaching behaviors: feedback/reward, correcting/prohibiting, questioning/directing, explaining/informing, monitoring/attending, managing, and no activity. The results of this study indicated that physical education specialists spent 70% of their time being effective teachers, which included behaviors such as feedback/reward, correcting/prohibiting, questioning/directing, explaining/informing. The non-specialists spent only 56% of their time being effective teachers. They had higher percentages in less effective teaching practices such as monitoring or attending. As for the activity levels of the children, the specialists had children active for approximately 35% of the time compared to 17% for the students of non-specialists.

Inservice Training

Effective staff development such as workshops, clinics, inservice training, seminars, and additional college courses are ways to educate teachers. Research
demonstrates that many factors such as length of inservice training, the principal's support and involvement in the new material, interest in the topic, years of teaching experience, and ongoing training all have an impact on in-service education.

Sonnenburg, (1992) examined classroom teacher change following an inservice educational training on the skill themes and movement concepts curriculum approach for elementary physical education teachers. The skill themes and movement concepts approach teaches the basic fundamentals of motor skill development before combining movements for advanced sports, games, dance, and gymnastics. Skill themes are the movement patterns whereas the movement concepts are the modifiers. This study consisted of eight teachers that voluntarily took part in a two-week inservice training at the Institute for Developmental Physical Education at a Northern California University. All eight teachers were interviewed. Five of the subjects were observed teaching a physical education class and filled out a critical incident self report. The results demonstrated from the self incident report, that changes in lessons were directly related to ideas learned in the workshop. Seven out of eight of the teachers successfully added activities to their physical education program following the workshop.

McKenzie, LaMaster, Sallis, and Marshall (1999) investigated classroom teachers physical education classes about the relationship between a teacher's own physical activity time outside of class compared to the activity time of their students. A total of 18 individuals, 16 females and 2 males, all 4th or 5th grade classroom teachers took part in the study. The Godin Leisure Time(GLT) exercise questionnaire (Godin & Shephard, 1985) was used in this study. The 18 participants completed 4 consecutive
surveys for 4 consecutive semesters. The surveys included self reported information regarding their personal exercise programs outside of school for periods lasting longer than 15 minutes, for a duration of 2 weeks. The subject’s personal exercise program activities were categorized into strenuous (9), moderate (5), or mild activity (3) in which each activity was given a point value.

After analyzing the classroom teachers’ personal leisure activity, data were gathered through 20 random observations of the classroom teacher teaching physical education over a 4 semester span. The instrument used during the random observations was SOFIT (System for Observing Fitness Instruction Time) (McKenzie, Sallis, and Nadar 1991). This instrument coded children’s activity level during a physical education class taught by the subjects. Children were randomly selected and were coded every 20 seconds throughout the physical education lesson. Besides children’s activity level coded, the instructors’ behavior and curricular context were coded.

The results from this study demonstrated that physically active classroom teachers outside of the classroom setting tend to teach physical education different from those teachers that live a more sedentary life. The results from this study also provided some support for the hypothesis that physically active teachers have higher quality physical education lessons in which children were more active.

Housner et al. (2008) studied the impact of a grant from the CDC that provided West Virginia teacher leaders to take part in a 9-month professional development academy. The 38 teachers who participated were mentored through a series of five different professional development activities from highly qualified individuals,
including two university professors of teacher education, two NASPE teacher of the year, and four district teacher of the year. These activities included: (1) designing, implementing, and assessing standards-based curriculum and instruction,

(2) preparing for National Board for Professional Teaching Standards (NBPTS) certification,

(3) advocating for health and physical education within the school and community,

(4) using technology in health and physical education programming,

(5) engaging in grant writing to support program goals.

The participants in the study concluded the professional development series with a 16 question, 4-point Likert scale, survey. All of the questions posed revealed at least a 3-point mean, which is agree on the Likert Scale. The three questions on the survey that the researchers deemed future educators need to focus on were all related to technology. Those questions were related to competency using an electronic grade book, implementing project based activities with technology, and competency working in IT environments. Overall, the teachers shared that the academy was a positive experience and that the teachers perceived significant growth in each of the five areas related to professional development in physical education.

Summary

The review of literature for this study consisted of teacher beliefs, perceptions, and socialization about teacher education, preservice classroom teachers, preservice physical educators, comparison studies of physical education specialists and to
classroom teachers, and the impact inservice training and professional development.

The importance of previous research concerning preservice educator backgrounds and personal experiences, in physical education, is important to understand an educator's philosophy, perceptions, and beliefs about what and how a quality physical education class should be taught. Analyzing personal biographies and experiences of preservice educators have proven that beliefs are formed at an early age and these primal experiences in physical education or athletics tend to mold their values.

The research about preservice teacher training in physical education or any kind of staff development, has proven that courses have a positive impact on preservice educators or classroom teachers knowledge regarding the importance of fundamental movement, and the importance of a quality physical education program. When comparing the quality of teaching between classroom teachers and physical education specialists, research has clearly stated that physical education specialists tend to be better prepared, and more pedagogically effective than classroom teachers.
CHAPTER III

METHODOLOGY

The purpose of this study was to examine the beliefs and perceptions that preservice elementary classroom teachers have concerning elementary physical education. The focus of this study was to examine whether or not the beliefs of preservice educators changed after completing a methods course in which they learned the appropriate ways to implement a quality physical education program. The following sections are be included in this chapter: Participant Selection, Instrumentation, Data Collection, and Analysis of Data.

Participant Selection

This study was conducted at a state university, located in Northern California, and included a course in children’s physical education that is required for Liberal Studies and Child Development majors who enter a fifth year credential program required in the state of California. The majority of the participants will become K-6 classroom teachers once their credentialing is completed. Five different instructors taught separate sections of the course, AFoundations of Children’s Physical Education. All instructors had extensive experience in the area of children’s physical education. Formal permission was
obtained by the University’s Human Subjects Review Committee and by the chair of the department of Kinesiology. Permission forms were completed by the participants to take part in the study that explained the nature of the research, requirements, and the procedures of confidentiality and anonymity (see Permission, Appendix A).

Surveys were distributed to the participants during the first week of the semester, and then again during the last week of the semester. One hundred and ninety (190) participants completed the Likert Scale questionnaire. All of the undergraduate students had participated in the 15 week semester long class on methods for teaching physical education for children.

Instrumentation

Two different research tools were used during the data collection. The researcher developed an informational survey that included questions regarding the participant’s demographics, such as age, gender, grade level classification, and their area of concentration. The survey also included a question asking the participants to rank ten school subjects, in order of priority; one being the most important and ten being the least important. The final questions asked the participants to describe their physical education experiences, as children at the elementary school level (see Pre-Survey Questionnaire Appendix, B). This survey was reviewed by a panel of professionals in the area of physical education, given to a small sample population (as part of a pilot study) before distribution to participants in this study.

The second tool used by the researcher for this study of preservice classroom
teachers was constructed by Xiang et al. (2002). The eleven question likert scale questions were derived from current research on values and purposes of physical education. The questionnaire went through a principle-component factor analysis and a confirmatory factor analysis to distinguish validity and reliability of the instrument used. The eleven-question Likert Scale survey asked the participants to express their thoughts for various questions related to the beliefs and perceptions that preservice elementary classroom teachers may have about elementary physical education. When answering the questions the participant chose from the following options: (SD) Strongly Disagree, (D) Disagree, (MD) Mildly Disagree, (MA) Mildly Agree, (A) Agree, (SA) Strongly Agree (See Likert Scale, Appendix C).

Data Collection

Quantitative data were collected from the participants on two occasions. The preservice teachers were administered a pre-survey on the last day of class, and a post-survey on the last day of class. Students were assured that these surveys were completely anonymous and that in no way reflected or affected their grade in the course. Participants were permitted to withdraw at anytime without retribution. Data were collected and divided into four components. Those components included: Demographics, School Subject Rankings, Likert Scale survey, and Responses from the Open-Ended Questions. The School Subject Rankings asked the participants to rank in order of priority, one being the most important and ten being the least important, the school subjects in which they perceive and believe are the most important subjects in an elementary school curricula.
The ten different subjects were listed vertically and a blank spot was provided for the participant to write down the rank that they believed fits with the given school subject. The surveys also included open-ended survey responses that asked the participant to justify why they ranked the academic subjects the way they did and other questions related to their personal experiences in physical education and perceptions about the content of children’s physical education.

Analysis of Data

Both quantitative and qualitative data were compiled and analyzed. The researcher calculated the differences between means, variances, degrees of freedom, and $t$-values for the ranking of the school subjects in the pre-survey and post-survey. The raw data were collected and $t$-tests were administered using a significant level of .05. This same procedure was done for the eleven question Likert Scale survey. The Open-Ended Questions were reviewed and read several times, and themes emerged using inductive analysis. Through inductive analysis, categories emerged from the data independently, based on the responses of the participant, rather than the impositions of the researcher (Patton, 1990). Initially, six themes emerged from the open-ended questions with YES responses and five themes emerged from the open-ended questions with NO responses.
CHAPTER IV

RESULTS AND DISCUSSIONS

This chapter is divided into four (4) sections. The first section provides a description of the context of the university, key demographics about the participants, and a brief description of the elementary physical education methods course examined in this study. The second section presents the quantitative data to include: School Subject Rankings and the interpretation and analysis of the Likert Scale Questionnaire. The third section presents the responses to the Open-Ended Survey Questions and emerging themes based upon researcher analysis. The chapter concludes with a discussion of the results.

Context and Participants

Golden State University is located in a rural Northern California town of approximately 85,000. The University serves approximately 15,000 students. For students following the career path to become an elementary education teacher they were required to take a course entitled Foundations of Childhood Physical Education. In the Fall of 2003, eight sections were taught by five different instructors, all whom used a similar syllabi and the same textbook *Children Moving: A reflective approach to teaching physical education* (Graham et al., 2003), and whom all focused on the importance of developing a developmentally and instructionally appropriate physical education program for elementary school students (NASPE, 2004).
Demographics

Two hundred and fifty (250) participants initially took part in the study. Of the two hundred and fifty participants one hundred and ninety (190) completed both the pre- and post-survey. The participants included one hundred and fifty-six females (156) and thirty-four males (34). Analysis of the participants included: Graduate students (2), Seniors (79), Juniors (91), Sophomores (16), and Freshman (2). One hundred fifty-seven of the participants were Anglo Saxon (157), while 33 listed African-American (3), Hispanic-American (17), and Asian-American (4). Nine listed other for their ethnicity.

In California, preservice teachers at the elementary level are to identify an area of concentration. The area of concentration for the 190 preservice participants were as follows: Child Development (33), Special Education (16), Mathematics (17), Art/Music (21), Bilingual Education (10), English (19), Health Education (12), Social Studies (11), Science (4), Physical Education (11), Psychology (4), and the remaining 32 stated they were undeclared.

One hundred and ten (110) of the participants stated that when they were students in elementary school, their classroom teacher taught them physical education. Forty-five of the participants stated that their physical education curricula was delivered by a physical education specialist only, and the remaining 35 stated they received instruction from both the classroom teacher and the physical education specialist. Of the 190 participants, only 45 stated that their physical education was structured learning, 17 stated that their physical education was supervised recess, and the remaining 128 stated
their physical education curricula included a combination of both structured learning and supervised recess.

Quantitative Data

Subject Ranking

Even though 190 participants completed the pre- and post-survey, only 139 successfully interpreted and completed the school subject ranking question. Participants were asked to rank in order from 1-10, (1) being most important to (10) being least important, the school subjects in which you as an elementary school teacher perceive and believe are the most important for children to learn. They were asked to use each number only once. The 10 school subjects to be ranked were as follows: Agriculture (AG), Art/Music/Theatre (AMT), Computers/Technology (CT), English (ENG), Foreign Language (FL), Health and Family Living (HLTH), Mathematics (MATH), Physical Education (PE), Science (SCI), and Social Studies (SS). The pre- and post-test rankings were statistically analyzed using a dependant t-test: Paired Two Sample for Means. The t-test is a statistical technique to assess the differences between two groups (Thomas & Nelson, 1996). In this study the participant rankings included analyzed pre-test analysis versus the post-test analysis.

Six out of the ten school subjects demonstrated a statistically significant change by the participants in the study. Those subjects included: PE, HLTH, FL, ENG, CT, and AMT. Physical education had the greatest positive change with $P(T<=t)$ (.009). Health had the greatest negative change with $P(T<=t)$ with (0.003) (see Table 1 for
results).

Table 1

School Subject Rankings

<table>
<thead>
<tr>
<th>Question: PHYSICAL EDUCATION: (N=139)</th>
<th>Mean</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pre-</td>
<td>Post-</td>
</tr>
<tr>
<td>ENG *2.34</td>
<td>1.86</td>
<td></td>
</tr>
<tr>
<td>PE *5.74</td>
<td>4.79</td>
<td></td>
</tr>
<tr>
<td>HLTH *4.99</td>
<td>5.63</td>
<td></td>
</tr>
<tr>
<td>FL *7.37</td>
<td>7.88</td>
<td></td>
</tr>
<tr>
<td>CT *5.55</td>
<td>6.01</td>
<td></td>
</tr>
<tr>
<td>AMT *6.07</td>
<td>6.52</td>
<td></td>
</tr>
<tr>
<td>SOC 5.32</td>
<td>5.01</td>
<td></td>
</tr>
<tr>
<td>SCI 5.24</td>
<td>4.93</td>
<td></td>
</tr>
<tr>
<td>MATH 3.42</td>
<td>3.27</td>
<td></td>
</tr>
<tr>
<td>AG 8.96</td>
<td>9.10</td>
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</tbody>
</table>

Significant at the .05 level

Likert Scale Questionnaire

Analysis of the survey included an eleven question Likert Scale. Out of the one hundred and ninety (190) participants one hundred and fifty participants (150)
completed the survey. The surveys that were matched according to specific codes that the participants assigned themselves for accuracy. Forty surveys were unable to be matched according to codes and were not used when analyzing the results. The pre- and post-test data were analyzed using a \( t \)-test to statistically determine if the changes from the pre- and post-surveys were statistically significant.

Figure 1 illustrates the pre-survey descriptive results and Figure 2 illustrates the post-survey descriptive results in percentages after having the participants answer what they believed fits the given statement with the choices of: (SD) Strongly Disagree, (D) Disagree, (MD) Mildly Disagree, (MA) Mildly Agree, (A) Agree, (SA) Strongly Agree.

Statistical analysis of the eleven questions from the survey follows.

**Question 1.** The first question asked the participants to indicate their beliefs about how they perceive physical education contributes to the development of the whole child. The majority (85%) of the preservice teachers in the initial survey agreed or strongly agreed to this question. Moreover, the post-survey demonstrated a positive increase of 11%, and 96% of the preservice teachers to believe that physical education contributes to the development of the whole child.

This 11% change is considered statistically significant at the .05 level of confidence (See Table 2 for complete results).

**Question 2.** The second question asked the participants to give their input on the following statement: Physical education allows children a fun break from regular
school activities. In the initial survey, 89% strongly agreed or agreed with the statement, however, the post-survey revealed that percentage dropped 5% to 84% of

<table>
<thead>
<tr>
<th>Pre-Survey Question (N=150)</th>
<th>SD</th>
<th>D</th>
<th>MD</th>
<th>MA</th>
<th>A</th>
<th>SA</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYSICAL EDUCATION</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Makes important contribution to the development of the whole child.</td>
<td>3%</td>
<td>0%</td>
<td>3%</td>
<td>9%</td>
<td>33%</td>
<td>52%</td>
</tr>
<tr>
<td>2. Allows children a fun break from regular school activities.</td>
<td>4%</td>
<td>0%</td>
<td>1%</td>
<td>6%</td>
<td>38%</td>
<td>51%</td>
</tr>
<tr>
<td>3. Is an integral part of school education.</td>
<td>3%</td>
<td>1%</td>
<td>2%</td>
<td>12%</td>
<td>46%</td>
<td>36%</td>
</tr>
<tr>
<td>4. Provides children opportunities to learn about health and fitness.</td>
<td>5%</td>
<td>3%</td>
<td>4%</td>
<td>9%</td>
<td>33%</td>
<td>46%</td>
</tr>
<tr>
<td>5. Is not as important as other subjects, like English.</td>
<td>10%</td>
<td>26%</td>
<td>15%</td>
<td>27%</td>
<td>18%</td>
<td>4%</td>
</tr>
<tr>
<td>6. Teaches children motor skills, like running, jumping, and throwing.</td>
<td>4%</td>
<td>3%</td>
<td>0%</td>
<td>3%</td>
<td>35%</td>
<td>55%</td>
</tr>
<tr>
<td>7. Is great for children to develop social skills, such as sharing equipment, taking turns, and cooperating with classmates.</td>
<td>4%</td>
<td>0%</td>
<td>3%</td>
<td>4%</td>
<td>39%</td>
<td>50%</td>
</tr>
<tr>
<td>8. Should be excluded from elementary school programs.</td>
<td>77%</td>
<td>20%</td>
<td>1%</td>
<td>0%</td>
<td>1%</td>
<td>1%</td>
</tr>
<tr>
<td>9. Is just about playing games and sports.</td>
<td>31%</td>
<td>41%</td>
<td>19%</td>
<td>5%</td>
<td>4%</td>
<td>0%</td>
</tr>
<tr>
<td>10. Is time to be with friends, talk, laugh, and be silly.</td>
<td>15%</td>
<td>21%</td>
<td>16%</td>
<td>28%</td>
<td>16%</td>
<td>4%</td>
</tr>
<tr>
<td>11. Deserves more credit than it is given in most</td>
<td>4%</td>
<td>1%</td>
<td>3%</td>
<td>11%</td>
<td>44%</td>
<td>37%</td>
</tr>
</tbody>
</table>
elementary schools.

Figure 1. Pre-survey results for questions 1 through 11.

<table>
<thead>
<tr>
<th>Post-Survey Question (N=150)</th>
<th>SD</th>
<th>D</th>
<th>MD</th>
<th>MA</th>
<th>A</th>
<th>SA</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYSICAL EDUCATION</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Makes important contribution to the development of the whole child.</td>
<td>1%</td>
<td>0%</td>
<td>1%</td>
<td>2%</td>
<td>35%</td>
<td>61%</td>
</tr>
<tr>
<td>2. Allows children a fun break from regular school activities.</td>
<td>0%</td>
<td>1%</td>
<td>2%</td>
<td>13%</td>
<td>37%</td>
<td>47%</td>
</tr>
<tr>
<td>3. Is an integral part of school education.</td>
<td>1%</td>
<td>0%</td>
<td>0%</td>
<td>7%</td>
<td>42%</td>
<td>50%</td>
</tr>
<tr>
<td>4. Provides children opportunities to learn about health and fitness.</td>
<td>1%</td>
<td>0%</td>
<td>0%</td>
<td>5%</td>
<td>30%</td>
<td>64%</td>
</tr>
<tr>
<td>5. Is not as important as other subjects, like English.</td>
<td>10%</td>
<td>43%</td>
<td>11%</td>
<td>22%</td>
<td>9%</td>
<td>5%</td>
</tr>
<tr>
<td>6. Teaches children motor skills, like running, jumping, and throwing.</td>
<td>1%</td>
<td>1%</td>
<td>0%</td>
<td>0%</td>
<td>26%</td>
<td>72%</td>
</tr>
<tr>
<td>7. Is great for children to develop social skills, such as sharing equipment, taking turns, and cooperating with classmates.</td>
<td>10%</td>
<td>2%</td>
<td>1%</td>
<td>3%</td>
<td>21%</td>
<td>63%</td>
</tr>
<tr>
<td>8. Should be excluded from elementary school programs.</td>
<td>85%</td>
<td>11%</td>
<td>1%</td>
<td>0%</td>
<td>1%</td>
<td>2%</td>
</tr>
<tr>
<td>9. Is just about playing games and sports.</td>
<td>49%</td>
<td>38%</td>
<td>8%</td>
<td>3%</td>
<td>1%</td>
<td>1%</td>
</tr>
<tr>
<td>10. Is time to be with friends, talk, laugh, and be silly.</td>
<td>25%</td>
<td>27%</td>
<td>17%</td>
<td>14%</td>
<td>12%</td>
<td>4%</td>
</tr>
</tbody>
</table>
11. Deserves more credit than it is given in most elementary schools.

<table>
<thead>
<tr>
<th></th>
<th>1%</th>
<th>0%</th>
<th>2%</th>
<th>4%</th>
<th>33%</th>
<th>60%</th>
</tr>
</thead>
</table>

Figure 2. Post-survey results for questions 1 through 11.
Table 2
Pre- and Post-Survey Results

<table>
<thead>
<tr>
<th>Question</th>
<th>Pre-</th>
<th>Post-</th>
<th>(P(T \leq t)) Two-Tail</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contribution to the whole child</td>
<td>5.22</td>
<td>5.60</td>
<td>*.001</td>
</tr>
<tr>
<td>Fun break from school</td>
<td>5.26</td>
<td>5.19</td>
<td>.290</td>
</tr>
<tr>
<td>Integral part of school education</td>
<td>5.03</td>
<td>5.40</td>
<td>*.002</td>
</tr>
<tr>
<td>Opportunities to learn about fitness</td>
<td>5.02</td>
<td>5.55</td>
<td>*.001</td>
</tr>
<tr>
<td>Not as important as other subjects</td>
<td>3.27</td>
<td>2.96</td>
<td>*.005</td>
</tr>
<tr>
<td>Teaches children motor skill development</td>
<td>5.26</td>
<td>5.66</td>
<td>*.001</td>
</tr>
<tr>
<td>Social Development for Children</td>
<td>5.22</td>
<td>5.64</td>
<td>*.005</td>
</tr>
<tr>
<td>PE should be excluded from school</td>
<td>1.28</td>
<td>1.29</td>
<td>.840</td>
</tr>
<tr>
<td>Just about playing games and sports</td>
<td>2.11</td>
<td>1.68</td>
<td>*.006</td>
</tr>
<tr>
<td>Time to be with friends, laugh and be silly</td>
<td>3.23</td>
<td>2.77</td>
<td>*.001</td>
</tr>
<tr>
<td>Deserves more credit than given</td>
<td>5.02</td>
<td>5.40</td>
<td>*.008</td>
</tr>
</tbody>
</table>

* Significant at the .05 level
the participants that strongly agreed or agreed with that statement. Although there was a
five percent decrease, this was not considered to be statistically significant (See Table).

**Question 3.** Question three asked the participants about their perceptions of
physical education as an integral part of one’s education. Eighty-two percent of the
participants initially stated they strongly agreed or agreed with this statement. However,
the post-survey revealed that 92% of the participants strongly agreed or agreed with that
statement. That is a positive change of 10% and is statistically significant at the .05 level
of confidence.

**Question 4.** Initially only 79% of the participants strongly agreed or agreed
with the statement that physical education provides children opportunities to learn about
health and fitness. The post-survey revealed that 94% strongly agreed or agreed with that
statement following the semester long methods course. This was a positive change of
15% and statistically significant (see Table 2).

**Question 5.** Regarding the statement: physical education is not as important
as other subjects, like English. Thirty-six percent of the participants initially disagreed or
strongly disagreed with that statement. The post-survey revealed that 53% of the
participants disagreed or strongly disagreed with that statement. Statistically the 17%
difference this was not considered to be significant.

**Question 6.** Question six asked the participants to respond to the following
statement: physical education teaches children motor skills like running, jumping, and
throwing. The pre-survey results revealed that 90% of the participants strongly agreed or
agreed with that statement. However, the results from the post-survey revealed that the
percentage increased 8% resulting in 98% of the participants that strongly agreed or agreed with that statement. The increase in eight percent (8%) is considered to be statistically significant.

**Question 7.** Eighty-nine percent of the participants initially strongly agreed or agreed that physical education is a great tool for children to develop social skills, such as sharing equipment, taking turns, and cooperating with classmates. The post-survey revealed that there was a 5% decrease that resulted in 84% of the participants that strongly agreed or agreed with the positive social aspect of physical education for children. The 5% decrease is considered to be statistically significant.

**Question 8.** Question eight had the participants perceive the importance of physical education in elementary schools. The question asked them if physical education should be excluded from elementary school programs. The pre-survey revealed that 97% of the participants agreed or strongly disagreed with the statement. The post-survey revealed that 96% of the participants strongly disagreed or disagreed that physical education should be excluded from elementary school programs. This 1% decrease is not statistically significant.

**Question 9.** Question nine asked the participants to respond to the following statement: physical education is just about playing games and sports. The pre-survey revealed that 72% strongly disagreed or disagreed with that statement. The post-survey concluded that there was a positive increase of 15% resulting in 87% of the participants that strongly disagreed or disagreed with that statement. That fifteen percent increase revealed to be statistically significant.
**Question 10.** When referring to question ten the statement that: physical education is time to be with friends, talk, laugh, and be silly. Fifty-two percent of the participants either disagreed or strongly disagreed with this statement. The post-survey revealed that 42% of the participants initially strongly disagreed or disagreed with that statement. The 16% difference that resulted is considered to be statistically significant.

**Question 11.** The final survey question asked the participants if they believe that physical education deserves more credit than it is given in most elementary schools. In the initial survey 81% of the participants strongly agreed or agreed with that statement. The post-survey revealed a positive 12% change in the participants perceptions that resulted in over 93% of the participants that strongly agreed or agreed that physical education deserves more credit than it is currently given in the elementary schools. This difference proved to be statistically significant.

**Open Ended Survey Questions**

The qualitative data was collected by using open-ended survey questions. Question 10 on the pre-test asked the participants if they had positive experiences in physical education as a child; 75% of the participants responded YES to that question and 17% of the participants responded NO. Eight percent of the participants had split responses mentioning that they had both positive and negative experiences. After multiple readings and analysis of the participants’ responses, key words and common themes were developed.

Six themes emerged from the open-ended question with YES responses. The
six themes were: enjoyed athletics, success/given awards, learned new things, break from the classroom, teamwork, and enjoyed the teacher (see Figure 3).

The most mentioned theme that emerged regarding positive experiences had to do with their individual passion for athletics (see Figure 3). The researcher noted that this high frequency (69) may have been due to the participants’ lack of understanding about the difference between sports in physical education class and competitive sports outside of class to include organized youth sport experiences.

Five themes emerged from the open-ended question with the NO responses. The five themes were: spotlighted, captains picking teams, too competitive, no instruction, and large classes/waiting in line (see Figure 4). Based on these data a small number of the participants in this study revealed negative experiences, as children, that are currently linked to developmentally inappropriate practices.

Question eleven on the pre-test was also an open-ended question that asked the participants to write one paragraph about what they thought was the purpose of elementary physical education. After multiple readings and analysis of the participants’ responses, key words and common themes were noted. Eight themes emerged from that question. The eight themes were: importance of physical education/fitness, learning skills about health, teamwork/social interaction,
Figure 3. Question 10 on the pre-test: Did you have positive experiences in physical education class as an elementary school child?

<table>
<thead>
<tr>
<th>THEME</th>
<th>TIMES MENTIONED</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enjoyed Athletics</td>
<td>69 times</td>
</tr>
<tr>
<td>Success/Awards</td>
<td>15 times</td>
</tr>
<tr>
<td>Learned New Things</td>
<td>13 times</td>
</tr>
<tr>
<td>Break from Classroom</td>
<td>11 times</td>
</tr>
<tr>
<td>Teamwork</td>
<td>3 times</td>
</tr>
<tr>
<td>Enjoyed Teacher</td>
<td>3 times</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>THEME</th>
<th>TIMES MENTIONED</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spotlighted</td>
<td>7 times</td>
</tr>
<tr>
<td>Captains Picking Teams</td>
<td>6 times</td>
</tr>
<tr>
<td>Too Competitive</td>
<td>4 times</td>
</tr>
<tr>
<td>No Instruction</td>
<td>3 times</td>
</tr>
<tr>
<td>Large Classes/Waiting in Line</td>
<td>2 times</td>
</tr>
</tbody>
</table>
Figure 4. Question 10 on the pre-test: Did you have negative experiences in physical education class as an elementary school child?
physical education needs to be changed/often overlooked, obesity/overweight children, fun time, skill development, outside classroom environment/recess (see Figure 5). The two primary themes and beliefs about the purpose of physical education had to do with the importance of educating our youth about physical education/physical fitness and learning skills about health.

<table>
<thead>
<tr>
<th>THEME</th>
<th>TIMES MENTIONED</th>
</tr>
</thead>
<tbody>
<tr>
<td>Importance of Physical Education/Fitness</td>
<td>46 times</td>
</tr>
<tr>
<td>Learning Skills about Health</td>
<td>33 times</td>
</tr>
<tr>
<td>Teamwork/Social Interaction</td>
<td>25 times</td>
</tr>
<tr>
<td>PE needs to Change/Often Overlooked</td>
<td>25 times</td>
</tr>
<tr>
<td>Obesity/Overweight Children</td>
<td>25 times</td>
</tr>
<tr>
<td>Fun Time</td>
<td>20 times</td>
</tr>
<tr>
<td>Skill Development</td>
<td>13 times</td>
</tr>
<tr>
<td>Outside Classroom Environment/Recess</td>
<td>22 times</td>
</tr>
</tbody>
</table>

Figure 5. Question 11 on the Pre-test: Explain what you think is the purpose of elementary physical education.

Question eleven on the post-test was slightly different, but the same eight themes emerged as in the pre-test questionnaire. It was a two part question. The first part asked the students to write down at least one paragraph about their beliefs and perceptions of elementary physical education. The same eight themes emerged as in the pre-survey questionnaire (see Figure 6).

When comparing the frequency of key beliefs and perceptions, there were
two themes that showed an increase. Those two themes were the importance of

<table>
<thead>
<tr>
<th>THEME</th>
<th>TIMES MENTIONED</th>
</tr>
</thead>
<tbody>
<tr>
<td>Importance of Physical</td>
<td>80 times</td>
</tr>
<tr>
<td>Learning Skills about Health</td>
<td>22 times</td>
</tr>
<tr>
<td>Teamwork/Social Interaction</td>
<td>20 times</td>
</tr>
<tr>
<td>PE needs to Change/Often Overlooked</td>
<td>18 times</td>
</tr>
<tr>
<td>Talked about Obesity/Overweight</td>
<td>11 times</td>
</tr>
<tr>
<td>Fun Time</td>
<td>6 times</td>
</tr>
<tr>
<td>Skill Development</td>
<td>59 times</td>
</tr>
<tr>
<td>Outside Classroom/Environment/Recess</td>
<td>2 times</td>
</tr>
</tbody>
</table>

Figure 6. Question 11 on the Post-Survey: Explain what you think is the purpose of elementary physical education.

physical education/fitness and skill development. On the pre-test importance of physical fitness for children was mentioned forty-six times. With the same question the post-test revealed that physical education/fitness for children was mentioned eighty times. That is nearly double the initial responses on the pre-test.

The other theme that showed a major change in frequency was the theme related to skill development. On the pre-test, the participants mentioned the importance of skill development only 13 times. However, the post-test revealed 59 responses demonstrating a belief in the importance of skill development.

Part two of question eleven on the post-test asked the preservice teachers if their perceptions had changed about the way physical education should be taught.
The vast majority of the participants wrote about how their perceptions and beliefs had changed following this physical education methods course. One female stated:

I only wish I had been taught by someone who believed in the generic levels of proficiency and teaching skill themes and movement concepts! My physical education experience [as a child] was hell, and above all it taught me to not be confident in my abilities. I think (well, I hope) things have changed a lot since then. This class gave me hope, lots of ideas, and showed me how important physical education really is.

Many participants also responded with comments regarding the importance of physical education for our youth. A male participant wrote,

I think physical education is valuable and more changes need to be made in the current programs at many schools. My perceptions have changed and I see the difference between appropriate and inappropriate methods and how much children can benefit from a good quality physical education program.

Another male participant shared,

I used to think physical education was just a time for students to have fun and be silly, but now I know it is to teach children to be physically fit throughout their lifetime.

Other participants reflected back when they had elementary physical education and shared comments about how they wish they were instructed differently. One male wrote,

From the things I have learned in this class, I'm sure that most of my teachers, growing up didn't follow specific lesson plans. I definitely believe they should have. I think that if everyone followed specific lesson plans and really took more time explaining the skills, more children would be much more comfortable and therefore be more active in physical education.

Many participants also shared their thoughts on how physical education should not just be a break from the classroom, but a time for children to actually learn skills. Another female participant stated,
My perceptions have changed and I think everyone who teaches physical education should have to take this class. Physical education should be about learning and not just playing. It is not a break from the classroom, but an opportunity for children to learn lifelong physical fitness concepts and skills.

Other comments were related to the importance of social interaction and skill development for children. One female participant commented,

Elementary physical education is so important! When I first started this course I thought of physical education as dodge ball and tag. It is so much more. Not only does it emphasize social interaction, but also gives kids basic skills and ideas to help them stay fit for a lifetime.

Other participants made comments regarding childhood obesity and the importance of overall health for children. A male participant mentioned,

After this class my ideas have really changed. I now think it is very important to teach physical education at the elementary level and to teach it well because of the health problems in today’s children.

Question twelve on the pre-test asked the participants about a future choice to teach physical education as a specialist in an elementary school. Sixty-two percent (62%) of the participants answered yes, 16% answered no, and a little less than a quarter of the participants (22%) stated that they would rather become a classroom teacher. The participants may have been confused by the wording of this question. Of the participants that stated they would rather be a classroom teacher 5% of them stated they would take a job as a physical education specialist if it was the only job out there.

The post-test results from the same question illustrates that after taking a fifteen week methods course 55%, of the participants stated yes to that question, 20% of the participants answered no, and a quarter of the participants (25%) stated that they would rather become a classroom teacher.
Discussion

This section includes a discussion of the results from the school subject rankings, the analysis of the pre-survey results, analysis of the post-survey results, and the open ended questions. Overall, the participants in this study demonstrated positive beliefs and perceptions concerning the importance of elementary physical education. These results support the findings by Xiang et al. (2002) and Sonnenburg (1992) about the importance of well designed preservice and inservice learning opportunities related to elementary physical education. This study also supports the research done by Humphries and Ashy (2002) that conveyed the importance of a quality structured physical education program that helps preservice classroom teachers develop their pedagogical skills and knowledge related to physical education. This study also validates the results found by Hart (2005) that a physical education methods course may have had an important and positive impact on the knowledge one gains regarding fundamental movement. Furthermore, this strengthens the research done by Barney and Pleban (2006) that indicates the importance of helping preservice teachers and professors better prepare future educators for real life teaching experiences. In addition, this study relates to the findings by Allison, Pissanos, and Sakola (1990) that suggested a serious look at past physical education experiences helps teachers make better choices about the experiences they will design and implement for children.

When the participants initially ranked the ten school subjects: Agriculture (AG), Art (AMT), Computers (CT), English (ENG), Foreign Language (FL), Health (HLTH), Mathematics (MATH), Physical Education (PE), Science (SCI), and Social
Studies (SS), the school subject that was ranked the highest was English with an average of 2.34. Physical education ranked in the middle of all ten subjects with a 5.74. The six school subjects that demonstrated statistically significant change in ranking were Physical Education, Health, Foreign Language, English, Computers, and Art. The four school subjects not demonstrating significant change were: Social Studies, Science, Math, and Agriculture.

According to the school subject rankings the change in the means from the pre- and the post-survey for physical education had the greatest change with a numerical difference of .95. Physical education went from the initial survey of 5.74 to a 4.79 on the post-survey and that difference proved to be statistically significant. This change could be directly related to the fact that the semester long physical education methods course, that the preservice educators were enrolled in, specifically focused on the importance of skill development, social development, and personal physical fitness for children. Health initially increased from a 4.99 in the pre survey to a 5.63 in the post-survey. That change of .64 resulted with the second greatest change although in a negative direction.

The changes in the school subject rankings were important when analyzing the results. The changes in rankings demonstrated that a quality preservice physical education methods course may have had a lot to do with the changes in beliefs and perceptions of those who study the importance of physical education for children. These results are consistent with the findings by Xiang et al. (2002), which conclude that a methods course had a positive impact on the teacher’s beliefs about physical education. It was interesting to note that the content areas of physical education and health had the
greatest change in this study. This finding must be tempered in that revealed some participants may have perceived that the content areas of health and physical education to be synonymous.

A basic assumption of this study was that the participants would provide honest and accurate information. The researcher had little control over the specific times and days the different instructors distributed the surveys. If the participants received the survey at the end of class they might not have read the material thoroughly and therefore may have offered limited information for analysis. Regulating a specific time period at the beginning of class to complete the surveys may have produced different results. Therefore, the researcher understood that specific protocols should have been explained to the instructors that agreed to take part in the research, or that the researcher should have attended each class and explained to the participants how to fill out the school subject ranking scales and the survey.

It should be noted that this researcher had no control over the past experiences, which the participants may have faced throughout their elementary school years, regarding positive or negative physical education experiences. Furthermore, one can only hope that the appropriate practices that were learned regarding movement concepts, skill development, social development, and personal physical fitness for children may have produced future tendencies to implement quality physical education programs.

The results from this study demonstrate how the beliefs and perceptions of preservice classroom teachers can change over a semester long methods course. This is
one of many steps toward advocacy for the importance of physical education for children. The knowledge and skills learned in preservice courses may help render necessary changes to reduce inappropriate practices over time in children’s physical education.

This research may shed a light for all universities regarding the importance of courses that teach appropriate practices, not only for physical education specialists, but for all elementary classroom teachers. The results demonstrated that changes in beliefs and perceptions did occur over a semester long methods course.

By designing and implementing effective methodology courses about the importance of appropriate practices for physical education, and having qualified instructors who know the material, and teach quality courses, may help render change regarding preservice educator beliefs and perceptions regarding the importance of physical education for children.
CHAPTER V

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

The following chapter is divided into four sections. First, a summary of the study to include research methods and results is presented. Next a synopsis of the conclusions based on the research question is discussed. Implications for preservice training are detailed in the third section and the fourth section concludes with recommendations for future research.

Summary

The purpose of this study was to examine the beliefs and perceptions of preservice elementary classroom teachers concerning elementary physical education. The intent of the study was to determine if preservice education beliefs or perceptions change after attending a semester-long methods course in which they learn the appropriate ways to implement a developmentally appropriate physical education curriculum. The study was conducted at a University in Northern California. A total of 150 participants completed both a pre- and post-survey.

The survey included an eleven question Likert Scale. The Likert Scale
surveys were analyzed and the data collected were converted into percentages. The Likert scale data were analyzed by comparing the differences in the pre- and post- survey data, using $t$-tests. Nine out of the 11 questions were found to be statistically significant. These questions included:

1. Physical education contributes to the development of the whole child.
2. Physical education is an integral part of school education.
3. Physical education provides opportunities to learn about fitness.
4. Physical education is as important as other school subjects.
5. Physical education teaches children motor skill development.
6. Physical education helps children to develop social skills.
7. Physical education is not just about playing games and sports.
8. Physical education is not a time just to be with friends, laugh and be silly.
9. Physical education deserves a lot more credit than it is currently given.

The school subjects rankings ($N=139$) were also analyzed using a paired $t$-test and six out of the ten school subjects with this population rendered statistically significant change after analyzing the pre- and post-survey data. The survey included a question that asked the participants to rank in order (1) being most important to (10) being least important the school subject areas that future educators perceive are the most important in a school curricula, and would be most beneficial for the future of our youth. The six subject areas that provided statistically significant change included: Physical Education (PE), Health (HLTH), Foreign Language (FL), English (ENG), Computers and Technology (CT), and Art Music and Theatre (AMT).
The three open ended questions on the pre-survey and the two open ended questions on the post-survey results were categorized according to themes. In the results section of the study, the frequency of responses and percentages, including the direct quotes from the participants, were used to show how the preservice teachers’ perceptions changed over the semester long course. The themes that described the participants’ positive experiences in physical education as a child included: enjoyment in athletics, being successful, learning new things, a break from the classroom setting, teamwork, and positive interaction with the teacher. The themes that described the participants’ negative experiences in physical education as a child included: being spotlighted, captains picking teams, no instruction, large class size/waiting in line, and too competitive.

Conclusions

The participants in this study provided detailed information and insights about their physical education experiences as a child, what they thought of elementary physical education prior to a semester long methods course, and what they thought of elementary physical education after a semester long methods course. The participants also provided insight about if their beliefs and perceptions had changed their notions of what and how physical education should be taught. The following major conclusions were found:

1. The subject area called physical education ranked number one by having the most positive change from a 5.74 in the pre-survey to a 4.79 in the post-survey. English was deemed the most important school subject for children and yielded the highest
ranking on the survey. English yielded 2.34 for the pre-survey and 1.86 on the post-survey.

2. The participants believed that physical education made an important contribution to the development of the whole child, and was not perceived as a fun break from other academic activities, and is an integral part of one's school education.

3. The participants believed that physical education gives children opportunities to learn about physical fitness, and is just as important as other school subjects.

4. The participants concluded that physical education was a great way for children to develop social skills, such as sharing equipment, taking turns, and cooperating with classmates, along with the importance of teaching children basic motor skills to include: running, jumping, and throwing.

5. The participants stated that they understood that physical education was not just about playing games and sports, and it was not a time just for children to be with friends, talk, laugh and be silly.

6. The participants in this study believed that physical education deserved a lot more credit than it is given in the elementary schools and more emphasis should be placed on this subject area based on current trends regarding childhood obesity.

Implications

The conclusions found in this study hold several implications about the beliefs and perceptions that preservice elementary classroom teachers may have about elementary physical education. These implications might influence teacher educators,
pre-service classroom teachers, and further researchers. One implication of this study is whether or not a semester-long course really changes ones beliefs over time. Furthermore, do preservice educators carry with them personal experiences from childhood that innately influence their beliefs? Studies completed by Brockhart and Freeman (1992) and Hutchinson and Buschner (1996) found that preservice educators often drift back to their past, regarding the way things were taught to them, often forgetting the methods they have learned in higher education. However, studies completed by Sonnenburg (1992), Lowell Dansby (2000) and Xiang et al. (2002) did find that such courses or training do have a fundamental impact on preservice educators. Based on this study, if classroom teachers are provided with carefully crafted coursework concerning instructionally and developmentally appropriate ways to implement physical education, then the participants beliefs and perceptions about physical education may render change over time.

Recommendations for Future Research

Throughout the research process it became apparent that a semester long course did have a positive impact on preservice teachers beliefs on the importance of elementary physical education for children. However, further research is necessary in order to understand how long it takes for perceptions to change over time and if individual prior experiences have a significant impact related to their personal beliefs about physical education. First, further research is warranted regarding preservice teacher training and professional development, and whether or not beliefs and perceptions are
sustained over time. Additionally, research at other universities that provide teacher
education programs, using other geographical locations, and with a larger sample size,
may provide depth of knowledge about preservice educators’ beliefs and perceptions.

This study rendered greater understanding about the beliefs and perceptions
of preservice teachers regarding the importance of physical education, if depth interviews
were completed prior to the distribution of the surveys and then again after the
completion of the coursework. Moreover, new research tools need to be validated to
measure teacher beliefs and perceptions about physical education at the preservice and
inservice levels of education. Xiang et al. (2002) share that there are very few studies that
merely focus on classroom teachers and their role as physical educators and advocates for
elementary physical education. More emphasis on physical education for children needs
to take place as children’s obesity levels continue to rise and the importance of
standardized testing continues to pressure administrators and classroom teachers. The
current emphasis on assessment and academic testing in core subjects has minimized the
importance of physical education and holistic learning for children.
REFERENCES
REFERENCES


Physical Education, (19), 311-324.


Graham, G., Parker, S., Wilkins, J., Fraser, R., Westfall, S., & Tembo, M. (2002). The effects of high-stakes testing on elementary school art, music, and physical education.


Teacher Education. 15(2), 45-54.


Form of Consent for Physical Education Master's Thesis

By voluntary consenting to be a participant of this study, I understand the following:

I will be a part of a research project in which the results of my participation will be collected as data for a master's thesis in physical education.

The purpose of this study is to analyze the perceptions of preservice educators on elementary physical education.

There are no risks involved with participation in this study. You will be asked to fill out a survey twice this semester and possibly volunteer to answer some open-ended questions.

My identity will remain anonymous throughout the study. The questionnaire responses, and informal interview transcripts will be locked from public access or viewing. Only Dr. Craig Buschner, Dr. Gayle Hutchinson, Dr. Cathrine Himberg, and Vickie Payne-Lourenco will have access to review data collected.

I can contact Vickie Payne-Lourenco at 530-891-3412 if I have any questions about the research, purpose of the study, procedures of the study, or the subject's rights.

I will not be penalized in any way if I choose not to participate in this study. I can discontinue my participation of the study at any time without penalty or loss of benefits to which I am otherwise entitled. Participation or refusal of participating in this study will not affect my grade in (PHED 102) at California State University, Chico.

________________________________________________________________________
SUBJECT'S NAME          SIGNATURE          DATE

________________________________________________________________________
Perceptions of Physical Education

Pre-Survey

Directions: Please answer each question truthfully. There are no right or wrong answers. If you have any questions, please ask.

1. Your I.D. number. This will strictly be used as a confidential identification number):
   ______  _____  _____

2. Date of birth__________  3. Gender _____ (male) _____ (female)

4. Classification:
   _____ Freshman
   _____ Sophomore
   _____ Junior
   _____ Senior
   _____ Graduate

5. Major_________________ Liberal Studies Area of concentration_________________

   Hispanic-American_____ Asian-American _____
   Other (please specify) _____

7. Primary physical education teacher at the elementary level (check one):
   Classroom teacher _____
   PE Specialist _____
   Both _____

8. Was your physical education like (check one): Structured Learning _____
   Recess _____
   Both _____
9. On the scale below, please rank in order from 1-10, (1) being the most important to (10) being the least important the disciplines in which you as an educator think are the most important disciplines in a typical school curricula.

Agriculture
Art/Music/Theatre
Computers/Technology/Business Education
English
Foreign Language
Health & Family Living
Mathematics
Physical Education
Science
Social Studies (Economics/History/Sociology)

Below, please give a brief justification of why you ranked numbers 1, 2, 9, and 10 the way you did.

1.

2.

9.

10.

10. Did you have positive experiences in elementary physical education as a child?
   a) If yes, please give one example below.

   b) If no, please give one example below.
11. Please write at least one paragraph about what you think was the purpose of physical education at the elementary school level.

12. Upon graduation from this university, if you were given a choice to teach physical education as a specialist, would you do it? Please give the reasons for your choice.
Perceptions of Physical Education

Post-Survey

Your I.D number. This will strictly be used as a confidential identification number.
*Remember it is the same number you put on the pre-test. ___  ____  ____  ____

1. On the scale below, please rank in order from 1-10, (1) being most important to (10) being least important the school subjects in which you as an educator think are the most important in a typical school curricula. Only use each number once!

Agriculture
Art/Music/Theatre
Computers/Technology/Business Education
English
Foreign Language
Health & Family Living
Mathematics
Physical Education
Science
Social Studies (Economics/History/Sociology)

Below, please give a brief justification of why you ranked numbers 1,2,9, and 10 the way you did.

1.
11. Since you have almost completed this foundation course, please write down at least one paragraph about what you believe and perceive was the purpose of elementary physical education and why you think so? Have your perceptions changed about the way PE for children should be taught?

12. After graduation from this university if you were given a choice to teach physical education as a specialist, would you do it? Please give reasons for your choice with at least one sentence.
Read each sentence and mark the box, which states how much you agree with it.

<table>
<thead>
<tr>
<th>ELEMENTARY PHYSICAL EDUCATION</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Mildly Disagree</th>
<th>Mildly Agree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Makes important contributions to the development of the whole child.</td>
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<td>2. Allows children a fun break from regular school activities.</td>
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<td>3. Is an integral part of school education.</td>
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<td>4. Provides children opportunities to learn about health and fitness.</td>
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<td>5. Is not as important as other school subjects, like English.</td>
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<td>6. Teaches children motor skills, like running, jumping, and throwing.</td>
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<td>7. Is great for children to develop social skills, such as sharing equipment, taking turns, and cooperating with classmates.</td>
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<td>8. Should be excluded from elementary school programs.</td>
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<td>9. Is just about playing games and sports.</td>
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<tr>
<td>10. Is time to be with friends, talk, laugh, and be silly.</td>
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<td>11. Deserves more credit than it is given in most elementary schools.</td>
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