

PHYSICAL ACTIVITY: VALUES AND BELIEFS OF  
PRESERVICE EARLY CHILDHOOD TEACHERS

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PHYSICAL ACTIVITY: VALUES AND BELIEFS OF  
PRESERVICE EARLY CHILDHOOD TEACHERS

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Abstract: The current study examines the beliefs and values of preservice early childhood teachers with regard to physical activity opportunities in the school environment, such as physical education, recess, classroom movement, and their sense of efficacy. Seventy-two females participated in the study ranging in age from 20-29. The participants completed a demographic questionnaire, the *Teachers' Sense of Efficacy Scale-long form* (Tschannen-Moran & Woolfolk Hoy, 2001) and a modified version of the *Elementary Physical Education Values and Purposes Scale* (Xiang, Lowy & McBride, 2002). The study found the questions pertaining to taking away physical activity as a form of punishment in the modified version of the *Elementary Physical Education Values and Purpose Scale* were not statistically reliable with a Cronbach's alpha coefficient of internal consistency of -.14; therefore further analysis could not be completed. However, the study found that preservice teachers who have a higher sense of efficacy including efficacy in Student Engagement, Instructional Strategies, and Classroom Management believe and value physical activity as important in the school environment ( $r = .67$ ,  $p < .01$ ). Teachers can provide many physical activity opportunities in the school environment, and these should not be limited to the required physical education programs. Teacher can integrate physical activity through songs, games, outdoor learning, dance, interactive learning centers, and free play. Through physical activity opportunities in the school environment, children are able to concentrate better during academic learning and continue to implement a healthy lifestyle for the future.

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## CHAPTER I

### INTRODUCTION

Physical activity improves general circulation, improves blood flow to the brain, and raises levels of endorphins, which all may improve behavior in a classroom setting (Wachs, 2008). Behavior problems can arise in the classroom when children are asked to stay still for a longer amount of time than they can handle (Ridgway, Northup, Pellegrin, LaRue & Hightshoe, 2003). Recess, physical education, and classroom movement are components of physical activity opportunities that teachers can provide so that children are not constrained to their seat for long amounts of time (Ridgway et al., 2003). Research findings indicate that children focused more and fidgeted less when they had recess compared to children who did not participate in recess that day (Ridgway et al., 2003). Additionally, children who are physically active and fit tend to be able to focus on a specific task for longer periods of time than those who are not physically active (e.g., Medina, 2008). When children are focused and engaged in a task, fewer behavior problems arise (Hammons & Fiese, 2011). Researchers continue to investigate how physical activity influences children's behavior in the classroom.

Physical activity is a crucial component for a healthy lifestyle and the development of young children. Schools continue to cut or limit physical education programs and recess to concentrate on academics, an unintended consequence of the No Child Left Behind Act (Ryan & Beighle, 2010). The law in Oklahoma requires schools to engage children in physical activity for 60 minutes a day, yet schools are lowering the time allotted for physical activity to focus on academics such as math and reading (Beaulieu, Butterfield, & Pratt, 2009). Children's need for physical activity is continuing to increase, yet our public schools deemphasize the importance of physical activity by decreasing or cutting physical activity opportunities in the school environment (Beaulieu et al., 2009). Likewise, families are spending more time on activities such as watching television, rather than being physically active (e.g., Brown, Nicholson, Broom & Bittman, 2011). Physical activity seems to be less important to families and schools, yet the rise of childhood obesity indicates, more than ever, that the need for physical activity is important. This is especially critical in the early childhood school environments when children begin to develop habits that impact their health and lifestyle (Nielsen, Grønfeldt, Toftegaard-Støckel & Andersen, 2012). It is important that early childhood educators teach and promote physical activity. Thus, the purpose of the current study was to examine the values and beliefs of preservice early childhood teachers regarding physical activity opportunities in a school setting and preservice teachers' sense of efficacy.



## CHAPTER II

### REVIEW OF THE LITERATURE

This review of the literature provides support for the importance of physical activity for children's well-being. First, an examination of physical activity in the school context is presented. The importance of recess, physical education, and physical activity in the classroom follows. Lastly, a discussion of the relationship among children's behavior and physical activity, and teachers' beliefs and values is included. Thus, laying the foundation for the present study that examined the association among preservice teachers who value and believe physical activity is important in a school environment as well as preservice teachers who take away physical activity as a form of discipline in their current classroom. In addition, the study examined whether there is a relationship among preservice teachers who have a high sense of efficacy and preservice teachers who place high importance on physical activity for their students.

Since the No Child Left Behind Act (2001), schools have shifted focus to academics, such as math and reading, and in doing so, have limited physical activity and physical education programs in schools (Ryan & Beighle, 2010). Some argue that this lack of physical activity is detrimental to the students' overall educational experience.

### **School Environment**

A school environment should be a place where children feel safe and comfortable to express themselves and receive an overall educational experience (Helgeson, 2011). By creating such an environment that supports children's overall health, schools are able to provide opportunities that guide children's academic, social, emotional, and physical needs through physical activity (Helgeson, 2011). This is particularly important given that research states that eight percent of American children ages four to five are considered overweight (Stellino & Sinclair, 2008). Research also reports that children should spend at least 60 minutes per day participating in physical activity, yet 40% to 50% of children ages six to eleven engage in less (Dunton, Kawabata, Intille, Wolch & Pentz, 2012). To provide children with the best overall educational experience schools and teachers should focus on physical activity as an important component in their learning process.

Studies show children establish lifetime patterns of physical activity during their elementary years that correspond to physical activity behavior later in life (Beulieu et al., 2009; Wadsworth, Robinson, Beckham, & Webster, 2012). Educators should take a proactive role in creating lifetime patterns of physical activity through recess, physical education programs, and opportunities for movement in the classroom (McKenzie, 2010).

Schools are becoming a key factor that can ensure that children receive at least some physical activity opportunities each day (DiGiacinto & Jones, 2010).

### **Recess**

One physical activity opportunity schools offer children is recess. Recess is most commonly viewed as play time that detracts away from the “real” learning. However, research shows recess can play a key role in children’s academic and health success (Ridgers, Saint-Maurice, Welk, Siahpush, & Huberty, 2011). Recess can be defined as a break during the school day that allows children the time for active free play in an outdoor environment (Barros, Silver & Stein, 2009); whereas, physical education programs are structured and time limited. However P.E. usually does not provide enough physical activity time and quality to meet health-related recommendations (Cardon et al., 2012). Recess then allows children physical activity choices that provide opportunities outside of a structured physical education program and may compensate for the lack of P.E. time (Barros et al., 2009). Furthermore, recess has potential for increasing children’s physical activity levels in early childhood (Ridgers et al., 2011). The National Association for Sport and Physical Education (2004) suggests that school recess should be provided at least once daily for 20 minutes or more. Studies indicate that only 67% of elementary schools provide daily recess for all grades, and only 11% of states require elementary schools to provide regularly scheduled recess (Ridgers et al., 2011). These statistics indicate a large percentage of school children are not benefiting from recess and experiencing a total educational experience.

Children not only need adequate recess time for physical activity purposes, but also to develop important social and personal skills (Ridgers et al., 2011). During free

play, children enhance their imagination and creativity while increasing social and problem-solving skills (Barros et al., 2009). Through recess, children learn how to share and play with peers, they also learn how to resolve conflict that might arise (Ridgers et al., 2011). Recess may be the only opportunity for some children to engage socially with other children; making recess a time to address students social and emotional needs as well (Elliott, 2011).

Teachers should provide children of all early childhood ages adequate time for free play such as recess, yet we see a trend in public schools: as children get older, recess time decreases (Beaulieu et al., 2009). McMurrer (2008) infers that since the No Child Left Behind Act (2001) was implemented, time for recess has declined substantially to focus on academics to improve children's test scores. Ironically, studies have shown that physical activity actually positively correlates with academic gains; furthermore, children who are physically fit tend to perform better academically (Castelli, Hillman, Buck & Erwin, 2007; Dills, Morgan & Rotthoff, 2011). By taking away or limiting recess, schools may be actually doing more harm than good to children's academic learning gains. Research findings indicate that children are more likely to participate in physical activity in an unstructured environment, although schools are reducing children's physical activity opportunities by lessening the dedicated time (Mota et al., 2005).

### **Physical Education Program**

Physical Education (P.E) is another physical activity opportunity that schools can provide. P.E. is defined as providing students with knowledge and skills necessary to perform a variety of physical activities, to maintain physical fitness, and to value as well as enjoy physical activity as an ongoing part of a healthy lifestyle (Robinson &

Wadsworth, 2010). Physical education programs are required in many school settings as highly- structured physical activity with specific goals and standards for children to meet (Robinson & Wadsworth, 2010; McKenzie, 2010).

Different states have different regulations about physical education programs. The amount of time and money that should be spent participating in P.E. classes varies from state to state (Sanchez-Vaznaugh, Sánchez, Rosas, Baek, & Egerter, 2012). The state of Oklahoma requires only two hours of physical education each week in public schools for Kindergarten through 5<sup>th</sup> grade (Sallis & McKenzie, 2012). The nationwide standard is for children to be physically active for sixty minutes a day, yet some kids get only 15 minutes of recess a day and physical education only twice a week at school (Healthy People, 2010). Thus, schools rely on the parents to provide opportunities after school for adequate time of daily physical activity, which may not always be possible for all families, making P.E. at school all the more important (Ihmels, Welk, Eisenmann, Nusser & Myers, 2009).

Time allotted for physical education programs is decreasing, yet the need for physical activity in early childhood is more prevalent than before with childhood obesity tripling in the past quarter of the century (Beaulieu et al., 2009). Childhood obesity is increasing with 21.2% of young children between two and five years of age being overweight or obese (Vidoni & Ignico, 2011). By decreasing physical activity opportunities, such as physical education programs, teachers and professionals are putting children at risk of not developing or maintaining a healthy lifestyle (Stoiber & Gettinger, 2011). Physical education classes are only one component in developing a healthy lifestyle yet increasing the levels of routine physical activity in children, which can lower

childhood obesity (Jones, 2005). P.E. improves children's lives and reduces the risk for future health problems (Vidoni & Ignico, 2011). Physical activity such as recess and physical education, helps children build and maintain healthy bones and muscles, reduce the risk of childhood obesity, and lowers feelings of depression and anxiety (Vidoni & Ignico, 2011).

Research indicates that many public elementary school districts implement a physical education program, but the quality of these programs may not be adequate (Robinson & Wadsworth, 2010). A quality physical education program can be defined as professionals creating a curriculum that aligns with state and national standards that provide activities to instill students with the need to be active for life (Richards & Wilson, 2012). The goal of a quality physical education program should be to help young children discover enjoyable physical activities and to increase their motivation to engage in future physical activity (Stellino & Sinclair, 2008). Caron et al (2012) found that 80.1% of physical education classes are taught in elementary schools by a certified teacher and 84.2% of districts required that newly hired physical education teachers be licensed, certified, or endorsed by the state to teach P.E. A quality physical education program should have educators that are certified and knowledgeable about physical activity to create an environment that is enjoyable and beneficial for children in all stages of development (Stellino & Sinclair, 2008). Many schools districts meet the requirements of time allotted for P.E, but the importance of P.E is not emphasized.

### **Physical Activity in the Classroom**

Since recess time is being cut and P.E programs may lack quality, teachers should incorporate physical activity in their classroom. Physical activity opportunities in the

classroom setting can include engaging the children in dancing, standing up and sitting down, stretching, and any arm and body movement (Wadsworth et al., 2012).

Movement, such as dancing in the classroom, can be used properly in congruence with curriculum to help children develop cognitively, emotionally, and physically (Helgeson, 2011). Research indicates that movement in the classroom should have the purpose of developing a certain skill to be most beneficial for children in their learning environment (Ryan & Beighle, 2010). Adding credence to this idea, Mahar et al. (2006) suggest children in early childhood should not sit consecutively for more than 30 minutes at a time. By having young children sit longer than 30 minutes, the teacher puts the children at risk for behavior problems and disruptions (Shor & Friedman, 2009). Incorporating planned physical activity in classroom transition time, such as marching in place, is an effective technique to get children to be physically active throughout the day and reduce behavior problems in the classroom (Wadsworth et al., 2012).

Though different from the benefits of recess and P.E., classroom movement offers benefits as well. Studies indicate that adding movement to everyday classroom activities not only engages students physically and mentally, but improves the classroom environment and reduces discipline problems such as off-task behavior (Helgeson, 2011; Prentice-Dunn & Prentice-Dunn, 2012; Wadsworth et al., 2012). Movement can stimulate and motivate children to be engaged in learning activities, creating a fun and meaningful learning environment (Helgeson, 2011). Children get to move their bodies and release energy while learning in an exciting way (Medina, 2008). Multiple studies have shown that when children learn new knowledge through movement, they are better able to remember the content (McCarron et al., 2010). All children learn differently through

multiple teaching approaches in the classroom; movement in the classroom is another technique teachers can use to capture students' attention while increasing physical activity in their daily routine (Medina, 2008). Given the benefits teachers should incorporate physical activity into their curriculum and everyday learning.

### **Teachers' Values and Beliefs**

Teachers' willingness to incorporate movement in their classroom depends largely on their beliefs and values. Borg (2001) stated that a belief serves as a guide to thought and behavior that may be consciously or unconsciously held. Beliefs help individuals make sense of the world by influencing how new information and events are perceived. All teachers hold some sort of beliefs about their work, their students, academic subjects and their roles and responsibilities as a teacher (Pajares, 1992). Teachers' beliefs can be developed during the early years they spend as students, which can alter how they teach in their classroom (Pajares, 1992). These personal experiences make up a large component of teachers' values and beliefs as they influence their perception of education, instructional behaviors, and student learning outcomes (Xiang, Lowry, McBride, 2002). Teacher's values and beliefs are the center of their daily decision-making and have a direct impact on their teaching methods and practice in their classroom (Xiang et al., 2002).

Teachers' beliefs can also come from what they know and what is proven to be true, meaning a belief is based on personal value and judgment, and knowledge is based on objective facts (Pajares, 1992). Usually beliefs and knowledge are intertwined, where what is proven to be right or true is what teachers' value and believe (Pajares, 1992). Yet Pajares (1992) stated that preservice teachers have commitments to prior beliefs based on



knowledge, but might alter their beliefs when new experiences occur. Teachers then may not hold beliefs due to proven facts and knowledge, but may react or do the opposite of what they believe due to the situation (Pajares, 1992). What a teacher believes and what actions the teacher actually takes can be very controversial. Teachers can believe that physical activity is very important for children to participate in, but then not provide children physical activity opportunities at school. Teachers' actions may not always portray their beliefs and values (Pajares, 1992).

**Conflict of ones beliefs.** Teacher' beliefs and actions may not always align, as in taking away physical activity as a form of punishment or consequence. Most teachers would agree that physical activity is important for young children to participate in, but in many classrooms, teachers are taking away physical activity, such as recess, as a form of punishment. Many teachers struggle with how to discipline children who consistently display inappropriate behavior at school, such as talking back to the teacher, and being disrespectful to peers (Barros et al., 2009; Vidoni & Ignico, 2011; Moser, 1982). Because most students show interest and enjoy free play time, such as recess, taking away or decreasing this physical activity time is a known consequence teachers use to manage behavior (Patt, 2011). Although by taking away or limiting physical activity, teachers may be creating a bigger risk for children academically and physically as behavior problems arise (Sanchez-Vaznaugh et al., 2012). Research indicates that after participating in physical activity children are better behaved; have an increase in positive mood, released energy and learn to share with peers (Mahar et al., 2006).

Another way teachers curb behavior problems is to give physical activity as a punishment. Some schools use physical activity as a punishment. For example, instead of

taking away recess, some educators make children walk laps or create a structured physical activity as the consequence for bad behavior (Cleland et al., 2011). Ryan and Beighle (2010) stated that forcing structured physical activity on children, such as walking laps during their free play time, can create a negative association with physical activity with the child. Children who view physical activity as fun and enjoyable are more willing to remain physically active in the future. Using physical activity as a form of punishment nullifies the fact that physical activity is healthy and enjoyable and not a punishment for misbehaving (Ryan & Beighle, 2010). Teachers can be proactive in reducing behavior problems by giving children adequate amount of physical activity opportunities throughout the day, thus, creating an interactive and safe learning environment (Helgeson, 2011; Tucker, 2008).

Using recess and other physical activity opportunities as a reward or punishment for children's behavior may demonstrate that teachers do not believe physical activity is important and that children should earn their physical activity time rather than be a part of the learning curriculum, which may be in conflict with the teacher's beliefs that physical activity is important. Physical activity is looked at as something that can be taken away from children that will not have a detrimental effect on their daily lives, even if the teacher believes physical activity is important in the school environment. When teachers use physical activity in this way, they are perpetuating the idea that physical activity is a lesser component of students' overall educational experience. This could be a "quick fix" to counter behavioral problems but has long-term consequences for children. Teachers should integrate and encourage physical activity in the school rather than use it as discipline and punishment.

## **Efficacy**

One way teachers can maintain beliefs and values is through gaining a higher sense of efficacy. According to Bandura (1994), efficacy is how people view their ability to handle situations in their lives, resulting in beliefs that affect everyday life decisions, motivation levels, how well individuals function, and how well they overcome adversity and deal with stress. Bandura (1994) indicated four influences on the development of efficacy, which can be applied to teachers: mastery experiences, watching other teachers succeed, support from others that they can succeed, and self-evaluation of strengths and weaknesses. Teachers will face many difficult situations throughout their career, but having a strong sense of efficacy allows them to persevere and succeed.

As teachers gain experience, their sense of efficacy should increase, as they become more confident in situations and about their own teaching skills. Preservice teachers develop efficacy through their field placements and experiences throughout their undergraduate teaching preparation program. Field placements offer preservice teachers learning opportunities to further their own development of efficacy. Several researchers and theorists have addressed the concept of teachers' sense of efficacy as one that has tremendous impact on student achievement and motivation (e.g., Bandura, 1997, Ciyer, Nagasawa, Swadener, & Patet, 2010, Guskey, 1987, Henson, 2001, Hoy 2004, and Ross, 1992).

Woolfolk and Hoy (1990) and Woolfolk, Rosoff, and Hoy (1990) found that teachers with high levels of efficacy were able to implement appropriate classroom management strategies, which led to fewer behavior problems. Teachers with a high sense of efficacy are able to facilitate student engagement, instructional strategies, and

classroom management more effectively than teachers with a lower sense of efficacy (Woolfolk & Hoy, 1990). Additionally, research findings indicate that students are often more motivated when teachers perceive themselves to be self-efficacious and a teacher's efficacy can lead students towards more class involvement and confidence when encountering challenges (Ashton & Webb, 1986; Midgley, Fedlafer, & Eccles, 1989; Ross, 1998; Ross, Hogaboam-Gray, & Hannay, 2001), which can lead to higher student achievement (Moore & Essleman, 1992). When teachers have a higher sense of efficacy, they are able to provide children with their best teaching approach and style, which results in children learning to the best of their ability.

A teacher's high sense of efficacy can be linked to many positive outcomes, including more developmentally appropriate and innovative teaching practices such as movement in the classroom and better student achievement (Cousins & Walker, 1995; Guskey, 1988). Thus, it could be argued children would receive more physical activity opportunities when teachers have a higher sense of efficacy because teachers would be more confident in incorporating physical activity in their classrooms. Teachers can have a direct effect on children's physical activity opportunities in the school environment by being an advocate for physical education programs and recess to the school administrators. Classroom teachers may not have direct control of physical education and recess time, but they can control their own classroom. Teachers who are more confident in their teaching abilities, having a high sense of efficacy, will incorporate physical activity into their classroom because they value physical activity as a important component in a child's overall educational experience.

## **The Current Study**

The purpose of the current study is to examine the values and beliefs of preservice early childhood teachers regarding physical activity opportunities in a school setting and preservice teachers' sense of efficacy. Specifically the following research questions were examined:

1) Is there an association among preservice teachers' values and beliefs towards physical activity in a school environment and taking away physical activity as a form of discipline in their classroom?

2) Is there a correlation among preservice teachers' sense of efficacy and the importance they place on physical activity for their students?

It is hypothesized that teachers who value and believe that physical activity is important in a school setting will not take away physical activity opportunities as a form of punishment. It is also hypothesized that teachers who have a high sense of efficacy value physical activity as important in a school setting.

## CHAPTER III

### METHOD

The purpose of this study was to examine the values and beliefs of preservice early childhood teachers regarding physical activity opportunities in a school setting and teachers' sense of efficacy.

#### **Participants**

Seventy- two early childhood preservice undergraduate students volunteered to participate in this research. The demographic distribution for participants can be seen in Table 3.1.

#### **Sampling Procedure**

The sampling procedure was one of convenience. All Early Childhood Education undergraduate students at a Midwestern University were invited to participate. Upon securing approval from the Institutional Review Board (IRB), the researchers scheduled a time through the Early Childhood instructors to solicit student participation. On the agreed upon time, the researcher explained to the student the purpose of the research project. The students were given a few minutes to read information about the surveys and determine whether they

were willing to volunteer as participants. Consent forms were distributed with a description of the project explaining there were no known risks associated with this research project. In this information sheet, the participants were informed that participation was voluntary and that they could discontinue the research activity at any time without reprisal or penalty. Questionnaires were distributed to all who agreed to participate.

**Table 3.1**  
Participants' Demographic Information

	<b>Number of Participants</b>
<b>Age</b>	
20 years old	14
21 years old	22
22 years old	19
23 years old	10
24 years old	1
25 years old	3
26 years old	2
29 years old	1
<b>Gender</b>	
Female	74
Male	0
<b>Race</b>	
American Indian/Alaska Native	8
Asian	2
White	62

## Measures

Participants answered a questionnaire consisting of demographic questions, the *Teachers' Sense of Efficacy Scale-long form* (Tschannen-Moran & Woolfolk Hoy, 2001), and a modified version of the *Elementary Physical Education Values and Purposes Scale* (Xiang, P., Lowy, S., McBride, R., 2002).

**Demographic questionnaire.** A demographic questionnaire was used for multiple studies to gather information about each participant's personal and teaching backgrounds. For the purpose of this study, questions regarding personal background included age, gender, and race classification. The demographic questionnaire can be found in Appendix A.

**Teachers' Sense of Efficacy Scale-long form.** Participants completed the *Teachers' Sense of Efficacy Scale-long form* (Tschannen-Moran & Woolfolk Hoy, 2001). The TSES contains 24-items which measure the following efficacy subscale constructs: Student Engagement, Instructional Strategies, and Classroom Management. The Likert type scale asks respondents to choose from nine responses ranging from 1 (*None at All*) to 9 (*A Great Deal*). The total teacher's sense of efficacy score could range from 24 to 216. The subscale Student Engagement consisted of items 1, 2, 4, 6, 9, 12, 14, and 22. The author reported a Cronbach's alpha coefficient of internal consistency of .87. The subscale Instructional Strategies consisted of items 7, 10, 11, 17, 18, 20, 23, and 24 showed a Cronbach's alpha coefficient of internal consistency of .91. The third and last subscale, Classroom Management, consisted of items 3, 5, 8, 13, 15, 16, 19, and 21. The author reported a Cronbach's alpha coefficient of internal consistency of .90. The three subscales were summed to make a total teachers' sense of efficacy that with a Cronbach's



alpha coefficient of internal consistency of .94. Thus, the authors of the scale reported that the TSES has adequate construct validity, reliability to support the scoring of the scale including the three subscales (Tschannen-Moran & Woolfolk Hoy, 2001).

The data for this study yielded the following reliability coefficients. The subscale Student Engagement indicated a Cronbach's alpha coefficient of internal consistency of .96; the subscale Instructional Strategies showed a Cronbach's alpha coefficient of internal consistency of .97; and, the subscale, Classroom Management indicated a Cronbach's alpha coefficient of internal consistency of .96. The three subscales were summed to make a total teachers' sense of efficacy that indicated a Cronbach's alpha coefficient of internal consistency of .99. The TSES can be further seen in Appendix B.

**Early Childhood Physical Activity Values and Beliefs Scale.** The Early Childhood Physical Activity Values and Beliefs Scale is a modified version of the Elementary Physical Education Values and Purposes (Xiang, Lowy, & McBride, 2002). This 16-item scale was developed to examine the participants' beliefs about physical activity in the school setting pertaining to recess, physical education, and classroom movement. The Likert type scale has six options ranging from 1 (*strongly disagree*) to 6 (*strongly agree*). These statements assess preservice teachers' beliefs and values of physical activity. An additional three questions, items 3, 6, and 19, were added to examine preservice teachers' beliefs on taking away physical activity as a punishment/consequence. Preservice teachers' responses allowed the researcher to understand their beliefs regarding physical activity in the school environment and if their behavior management style incorporates taking away physical activity. The Early Childhood Physical Activity Values and Beliefs Scale can be found in Appendix C.

An analysis pertaining to physical activity beliefs showed a Cronbach's alpha coefficient of internal consistency of .93 confirming reliability.

### **Analysis**

Upon completion of the data collection, the responses to the questionnaires gathered were coded and prepared to be analyzed using IBM SPSS statistics software. Data was double checked for accuracy. Following this procedure, the researcher conducted statistical tests in order to respond to each of the research questions stated above. Descriptive statistics were used to describe the participants' demographics. A simple calculation of means of 16-items provided information regarding preservice teachers' beliefs about the importance of physical activity in the school environment. The value of physical activity was generated from the responses to the Early Childhood Physical Activity Values and Beliefs Scale, without including items 3, 6, and 19, which assessed guidance practices that counter the value of physical activity. The means of the three guidance practice items (3, 6, and 19) and that of the other 16 items were correlated to determine the association between the selected guidance practices and the value or importance that teachers attribute to physical activity. The hypothesis driving this analysis is that the value of physical activity would be negatively correlated to the use of deprivation of physical activity as a form of punishment.

Preservice teachers' sense of efficacy score was generated from the responses of the Teachers' Sense of Efficacy Scale- long form. Correlational analysis was used to determine whether there is an association between the teachers' sense of efficacy and their beliefs and values regarding physical activity opportunities. It is hypothesized that

the 16-item value of physical activity would be positively correlated to the sense of efficacy of the preservice teacher.

## CHAPTER IV

### PHYSICAL ACTIVITY: VALUES AND BELIEFS OF PRESERVICE EARLY CHILDHOOD TEACHERS

#### **Abstract**

The current study examined the beliefs and values of preservice early childhood teachers in regard to physical activity opportunities in the school environment such as physical education, recess, and classroom movement. Seventy-two females participated in the study ranging in age from 20-29. The participants completed a demographic questionnaire, the *Teachers' Sense of Efficacy Scale-long form* (Tschannen-Moran & Woolfolk Hoy, 2001), and a modified version of the *Elementary Physical Education Values and Purposes Scale* (Xiang, Lowy, & McBride, 2002). The study specifically examined whether there is an association among preservice teachers' values and beliefs towards physical activity in a school environment and their use of physical activity as a form of discipline in their classroom. In addition, the study examined the relationship of

preservice teachers' sense of efficacy and beliefs regarding the importance of physical activity for their students. Results indicated that the questions pertaining to taking away physical activity as a form of punishment were not statistically reliable with a Cronbach's alpha coefficient of internal consistency of -.138; therefore, further analysis could not be completed. However, the results indicated that preservice teachers who have a higher sense of efficacy believe and value physical activity as important in the school environment ( $r = .67, p < .01$ ). Teachers can provide students with many physical activity opportunities in the school environment, and opportunities should not be limited to the required physical education programs. Teachers can integrate physical activity through songs, games, outdoor learning, dancing, interactive learning centers, and allotting more time for free play. Through physical activity opportunities in the school environment, children are able to concentrate better during academic learning and continue to implement a healthy lifestyle for the future.

### **Introduction**

Physical activity is important for all people to live a healthy lifestyle. People should become physically active at a young age to create lifetime patterns of being physically active and healthy (Beulieu, Butterfield & Pratt, 2009). There is a heightened awareness of the need to eat more nutritiously and exercise more often to create a healthy lifestyle. As an example, the First Lady of the United States, Michelle Obama, recently created a proactive program called "Let's Move!" launched in 2010. Unfortunately, some schools are cutting or limiting physical education programs and recess to concentrate on academics as an unintended consequence of No Child Left Behind Act (Ryan & Beighle, 2010). Research shows that children focus more and fidget less when

they had just participated in physical activity and that children who are physically fit tend to be able to focus on specific tasks for longer periods of time, causing fewer behavior issues in the classroom (Medina, 2008; Ridgway, Northup, Pellegrin, LaRue & Hightshow, 2003). Schools are offering less physical activity opportunities for children to participate in, but research clearly states that children are better behaved and more engaged in academic learning when they have physical activity opportunities.

The need for physical activity is becoming more important as obesity rates continue to rise, but our schools are deemphasizing the importance of physical activity by decreasing opportunities. Some schools do not provide children with the adequate 60 minutes a day of physical activity, which could be a factor in the tripling of childhood obesity rates in the past 25 years (Beaulieu et al., 2009). Vidoni and Ignico (2011) reported that 21.2% of young children between two and five years of age are overweight or obese. Researchers and many professionals know that physical activity is important in the school environment and for a healthy lifestyle, but many times what we believe is important is not what is actually implemented in our daily lives (Pajares, 1992). Thus, the purpose of the current study was to examine the values and beliefs of preservice early childhood teachers regarding physical activity opportunities in a school setting and teachers' sense of efficacy. The study specifically examined whether there is an association among preservice teachers who value and believe physical activity is important in a school environment and preservice teachers taking away physical activity as a form of discipline in their classroom. In addition, the study examined the relationship of preservice teachers' sense of efficacy and preservice teachers' beliefs regarding the importance of physical activity for their students. It is hypothesized that teachers who

value and believe that physical activity is important in a school setting will not take away physical activity opportunities as a form of punishment. It is also hypothesized that teachers who have a high sense of efficacy will value physical activity as important in a school setting.

## **Method**

### **Sampling procedure**

The sampling procedure was one of convenience. All preservice early childhood students enrolled in the Early Childhood Education Program at a Midwestern university were invited to participate. The purpose of the research project and the questionnaires they completed was explained to students. In order to follow university procedures approved by the Institutional Review Board (IRB), the participants were given a few minutes to read information about the surveys and determine whether they were willing to participate in the research study. Consent forms were distributed with a description of the project explaining there were no known risks associated with this research project. In this information sheet, the participants were informed that participation was voluntary, and subjects could discontinue the research activity at any time without reprisal or penalty.

Seventy-two female early childhood preservice undergraduate students between the ages 20-29 volunteered to participate in this research ( $M= 21.22$ ,  $SD=3.92$ ). There were eight American Indian/Alaskan Native, two Asians, and 62 white participants.

### **Measures**

Participants answered a questionnaire consisting of demographic questions, the *Teachers' Sense of Efficacy Scale-long form* (Tschannen-Moran & Woolfolk Hoy, 2001),

and a modified version of the *Elementary Physical Education Values and Purposes Scale* (Xiang, Lowy, & McBride, 2002).

**Demographic questionnaire.** A demographic questionnaire questions regarding personal background including age, gender, and race classification were utilized.

**Teachers' Sense of Efficacy Scale-long form.** Participants completed the *Teachers' Sense of Efficacy Scale-long form* (Tschannen-Moran & Woolfolk Hoy, 2001). This scale (TSES) contains 24-items that measures the following efficacy subscale constructs: Student Engagement, Instructional Strategies, and Classroom Management. The TSES has adequate construct validity, reliability, and factor analysis to support scoring of subscales and a total score (Tschannen-Moran & Woolfolk Hoy, 2001). Validity and reliability pertaining to this scale can be found at Tschannen-Moran and Woolfolk Hoy (2001) *Teacher efficacy: Capturing and elusive construct*.

**Early Childhood Physical Activity Values and Beliefs Scale.** The Early Childhood Physical Activity Values and Beliefs Scale is a modified version of the *Elementary Physical Education Values and Purposes* (Xiang, Lowy, & McBride, 2002). This 16-item scale was developed to examine the participants' beliefs about physical activity in the school setting pertaining to recess, physical education, and classroom movement. The Likert type scale has six options ranging from 1 (*strongly disagree*) to 6 (*strongly agree*). The total physical activity values and beliefs score could range from 16 to 96. These statements assess preservice teachers' beliefs and values of physical activity and their beliefs on taking away physical activity as a punishment/consequence. Preservice teachers' responses allowed the researcher to understand their beliefs



regarding physical activity in the school environment and if their behavior management style incorporates taking away physical activity.

### Early Childhood Physical Activity Values and Beliefs Scale

Please indicate the degree to which you agree or disagree with each statement

<b>How much do you agree with each statement</b>	<b>Strongly Disagree</b>	<b>Moderately Disagree</b>	<b>Slightly Disagree</b>	<b>Slightly Agree</b>	<b>Moderately Agree</b>	<b>Strongly Agree</b>
1. Physical activity makes important contributions to the development of the whole child.	1	2	3	4	5	6
2. Physical activity allows children a fun break from regular school activities.	1	2	3	4	5	6
3. Taking away students opportunities for physical activity is an appropriate form of discipline.	1	2	3	4	5	6
4. Physical activity is an integral part of school education.	1	2	3	4	5	6
5. Physical activity provides children opportunities to learn about health and fitness.	1	2	3	4	5	6
6. Keeping students in during recess is an effective form of punishment.	1	2	3	4	5	6
7. Physical activity is as important as other school subjects, such as English and Math.	1	2	3	4	5	6
8. Recess takes away from children's academic learning.	1	2	3	4	5	6

9. Movement in the classroom takes away from children’s academic learning.	1	2	3	4	5	6
10. Physical activity teaches children motor skills, such as running, jumping and throwing.	1	2	3	4	5	6
11. Teachers should integrate physical activities into their classroom curriculum.	1	2	3	4	5	6
12. Physical activity helps children develop social skills, such as sharing, taking turns, and cooperating with classmates.	1	2	3	4	5	6
13. Recess should be removed from elementary schools to allow more instructional time.	1	2	3	4	5	6
14. Physical activity is just about playing games and sports.	1	2	3	4	5	6
15. Teachers should integrate opportunities for physical movement to their math, science, social studies, and language arts lessons.	1	2	3	4	5	6
16. Physical activity is a time to be with friends, talk, laugh, and be silly.	1	2	3	4	5	6
17. Movement in the classroom is important.	1	2	3	4	5	6
18. Physical activity deserves more credit and time than given in most elementary schools.	1	2	3	4	5	6
19. Recess is a privilege and is something that should be earned.	1	2	3	4	5	6

Items highlighted in grey pertain to taking away physical activity as a form of punishment/discipline

An analysis pertaining to physical activity beliefs showed a Cronbach's alpha coefficient of internal consistency of .93 confirming reliability. Items 3, 6 and 19 were added to examine if teachers were taking away physical activity as a form of punishment/consequence.

## **Results**

The current study was guided by two research questions:

The first research question examined whether there is an association among preservice teachers who value and believe physical activity is important in a school environment and their beliefs about taking physical activity as a form of discipline. Due to modifications of the Early Childhood Physical Activity Values and Beliefs Scale, internal consistency was analyzed. An initial analysis of the 16 items pertaining to values and beliefs of physical activity showed a Cronbach's alpha coefficient of internal consistency of .93 for the total scale. An initial analysis of the 3 items (3, 6, and 19) pertaining to guidance practices showed a Cronbach's alpha coefficient of internal consistency of -.14. The guidance practices questions were found not to be statistically reliable. Therefore, the correlation analysis could not be completed due to the unreliable measures.

The second research question examined whether there is a correlation among preservice teachers who have a high sense of efficacy and the importance they place on physical activity for their students. Summing together 24 items of teachers' sense of efficacy generated a total score of preservice teachers' sense of efficacy, which was comprised of the three sub-scales: Engagement, Instruction, and Management. The

subscale Student Engagement indicated a Cronbach's alpha coefficient of internal consistency of .96 as the subscale Instructional Strategies showed a Cronbach's alpha coefficient of internal consistency of .97. The third subscale, Classroom Management, indicated a Cronbach's alpha coefficient of internal consistency of .96. The three subscales were summed to make a total teachers' sense of efficacy that indicated a Cronbach's alpha coefficient of internal consistency of .99.

The means for these subscales can be found in Table 4.2. The total of teachers' sense of efficacy scores could range from 24 to 216. The mean of teachers' sense of efficacy was 161.97 ( $SD=40.02$ ). In order to obtain the overall score of the beliefs and values of preservice teachers on physical activity, 16 items of physical activity values and beliefs were added. These scores could range from 16 to 96. The average value and belief in physical activity was 86.23 ( $SD= 16.05$ ).

**Table 4.1**

Teachers' Sense of Efficacy Sub-Scale Means

	<b>Mean</b>	<b>SD</b>
<b>Efficacy of Student Engagement</b>	54.54	13.51
<b>Efficacy of Instructional Strategies</b>	54.60	13.90
<b>Efficacy of Classroom Management</b>	52.86	13.47
<b>Total Sense of Efficacy</b>	161.97	40.02

Pearson's correlation coefficients were analyzed to determine the association among preservice teachers' sense of efficacy and preservice teachers' values and beliefs regarding the importance of physical activity. Results indicated a strong positive

relationship with a teacher's sense of efficacy and her beliefs regarding the importance of physical activity ( $r = .67, p < .01$  2-tailed). Furthermore, the beliefs regarding importance of physical activity were also significantly related to all three subscales: Efficacy in Student Engagement ( $r = .80, p = .00$ ), Efficacy in Instructional Strategies ( $r = .67, p = .00$ ), and Efficacy in Classroom Management ( $r = .63, p = .00$ ). Table 4.3 displays inter-item correlation matrix of the three sub-scales. The results clearly indicate that preservice teachers who have a higher sense of efficacy highly value the importance of physical activity in the school environment.

**Table 4.2**  
Inter-Item Correlation Matrix

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	<b>Instruction</b>	<b>Engagement</b>	<b>Management</b>
<b>Instruction</b>	1		
<b>Engagement</b>	.95	1	
<b>Management</b>	.94	.93	1

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### **Discussion**

The first research question examining preservice teachers' beliefs and values of physical activity in relation to taking away physical activity as form of punishment/consequence was not able to be analyzed due to lack of reliability among three items that addressed guidance practices. However, the second research question

examining if preservice teachers' sense of efficacy is correlated with believing physical activity to be important in schools did show a strong positive relationship. This supports the hypothesis: preservice teachers who have a higher sense of efficacy value physical activity in the school environment.

Preservice teachers' values and beliefs also correlated with all three sub-scales of efficacy: Student Engagement, Instructional Strategies, and Classroom Management. This positive correlation could be further explained as teachers who are more confident in their teaching skills, such as the three subscales, are then more comfortable in implementing physical activity in their classroom. Typically, teachers who have an interactive classroom have a good sense of classroom and behavior management, meaning teachers who have control over their classroom might be more willing to implement physical activity in their classroom because they feel confident in managing children's behavior. On the other hand, teachers who are not confident in their classroom management might not implement physical activities because it might disrupt the normal climate, and behavior problems could arise. Teachers who excel in engaging students in their learning are not just teaching children one way, but implementing many different strategies to meet the needs of all learners. One of these strategies could be incorporating movement into the learning curriculum as an instructional method. Teachers who are confident in their teaching skills pertaining to student engagement and instructional strategies might use physical activity as a way to get children interested in learning the content.

Results of the present study suggest that, school faculty and administrators should gain a better understanding of why physical activity is important in a school setting and

how schools can provide teachers and students with resources and opportunities to implement physical activity. Schools personnel should hold themselves accountable to provide students with adequate physical education programs that are appropriate for all students. Schools personnel can also provide physical activity opportunities by allotting recess time for children of all ages from Kindergarten through 5<sup>th</sup> grade without decreasing the amount of time as they get older. Teachers should be allowed to provide children with extra recess opportunities. This will allow teachers to be able to implement physical activity outside of the classroom environment giving, children more unstructured physical activity opportunities throughout the day.

In many schools, teachers have only control of what goes on in their classroom with school policies regulating common areas. Teachers do not necessarily decide when they can take their students to P.E. and how long they stay there, this usually outlined by the school's principal.

Teachers' can provide physical activity opportunities in their classroom in numerous ways that support overall development and healthy lifestyles for children. Possible recommendations are implementing physical activity through music and dance, interactive learning centers, and using dramatic play when reading literature. Another recommendation is integrating science outdoors as a way to get children active and learning through exploration of nature. Teachers should allow more time for free play activities such as recess and not take away recess as a form of punishment to provide children with more opportunities for physical activity. Teachers can enhance free play by planning physical activities and providing resources that stimulate children's learning and fine and gross motor skills. These resources can include jump ropes, large and small

balls, and sidewalk chalk.

Preservice teachers learn ways to be an effective teacher through their teacher preparation program. The current study is an example to why teacher preparation programs should emphasize physical activity in the school setting. Through the teacher preparation program preservice teachers gain experience and confidence which may lead to a high sense of efficacy, but does not focus directly on the importance of incorporating physical activity into learning curriculum and the school environment. Teacher preparation programs can help prepare preservice teachers to plan for physical activity opportunities in their classroom by educating them on how physical activity can enhance children's academic learning. The teacher preparation program can also teach preservice teachers how to develop lesson plans that integrate physical activity into children's everyday learning. By educating teachers about the benefits of physical activity in the school and classroom environment preservice teachers will be more confident to implement physical activity in their future classrooms.

A major limitation to this study was not being able to analyze if preservice teachers' beliefs and values of physical activity correlate with teachers taking away physical activity opportunities. This would have provided insights to the relationship between the importance teachers have on physical activity and their behavior management practices. Another limitation in the current study is the sample size and the lack of diversity within the sample. The sample size was only 72 participants, and all were females and mostly white currently living in the same geographic area. A larger sample may yield a more diverse group of participants and results. Examining only preservice teachers for the current study is also a limitation due to the lack of experience



the participants have as teachers. Future researchers could include experienced educators to gain diversity in teaching experience.

Future research developing a reliable measure for the use of guidance practices that impact access to physical activity can be conducted to examine the use of guidance practices that impact access to physical activity. In the current study, only three items in the scale pertained to taking away physical activity. The scale could be modified to include more items pertaining to taking away physical activity that could lead to a more reliable scale for further research.

It is important to examine the values and beliefs of preservice teachers' regarding physical activity because the need for physical activity is very prevalent in schools. Teachers believe physical activity opportunities should be given in the school environment, but are assigned time for their students to participate in recess and P.E. Children are not receiving these physical activity opportunities because schools are focusing on academic learning rather than the child's overall development. However, teachers can implement movement in their classroom that not only allows children to be physically active, but also has academic gains. A teacher's teaching style can have a direct impact on a child's health by increasing physical activity opportunities in the classroom.

The current research study explains that teachers who have a high sense of efficacy in their teaching abilities believe physical activity is important in the school setting, indicating that teachers who are more confident may implement physical activity into their academic curriculum. With more physical activity opportunities children are able to maintain a healthier lifestyle and decrease the ongoing trend of childhood obesity.

Thus, it is more important than ever for teachers to implement physical activity in their classroom and school setting for children to receive the overall educational experience they deserve to continue as lifelong learners.

## References

- Beaulieu, L., Butterfield, S. A., & Pratt, P. (2009). Physical activity opportunity in United States public elementary schools. *Physical Activity, 4*, 33-36. doi:0.1016/j.ypped.2009.06.011
- Medina, J. J. (2008). Brain rules: 12 principles for surviving and thriving at work, home, and school. Seattle, WA: *Pear Press*
- Pajares, F. (1992). Teachers' beliefs and education research: Cleaning up a messy construct. *Review of Educational Research, 62*, 307-332.
- Ridgway, A., Northup, J., Pellegrin, A., LaRue, R., & Hightshoe, A. (2003). Effects of recess on the classroom behavior of children with and without attention-deficit hyperactivity disorder. *School Psychology Quarterly, 18*, 253-68. doi:10.1521/scpq.18.3.253.22578
- Ryan, C. A., & Beighle, A. (2010). Resources for increasing physical activity in children and youth. *Strategies: A Journal for Physical and Sport Educators, 24*, 22-25.  
doi:10.1080/17408980902729370
- Tschannen-Moran, M., & Woolfolk Hoy, A. (2001). Teacher efficacy: Capturing and elusive construct. *Teaching and Teacher Education, 17*, 783-805.
- Vidoni, C., & Ignico, A. (2011). Promoting physical activity during early childhood. *Early Child Development and Care, 181*, 1261-1269. doi:10.1080/03004430.2010.523786
- Xiang, P., Lowy, S., & McBride, R. (2002). The impact of a field-based elementary physical education methods course on preservice classroom teachers' beliefs. *Journal of Teaching in Physical Education, 21*, 145-161

## CHAPTER V

### DISCUSSION

Children who receive more physical activity opportunities are more likely to succeed in academic learning, maintain appropriate development, and live an overall healthy life (Ridgeway et al., 2003). Children need more physical activity opportunities in the school environment than just going to P.E. a few times a week and recess when the class is behaving well as an occasional reward. Copple and Bredekamp (2009) state that children need to be given multiple physical activity opportunities throughout the day with adult instruction (physical education) and opportunities to practice new skills (recess, free play).

The present study supports previous research by demonstrating that teachers with a higher sense of efficacy also value and believe physical activity as important in the school environment through physical education, recess, and movement in the classroom. This positive correlation could mean that teachers, who are more confident in their teaching skills, are also more comfortable in implementing physical activity in their classroom. Typically, teachers who have an interactive classroom have an interactive classroom have a good sense of classroom and behavior management, meaning teachers

who have control over their classroom might be more willing to implement physical activity in their classroom because they can manage the students' behavior. On the other hand, teachers who are not confident in their classroom management might not implement physical activity on the contrary, they devise rules and regulations that include statements such as: "Always remain in your seat" and "Don't talk to other student during learning time". Teachers who excel in engaging students in their learning are not just teaching children one way, but implementing many different strategies to meet the needs of all learners. One of these strategies could be incorporating movement into the learning curriculum as an instructional method. Teachers who are confident in their teaching skills pertaining to student engagement and instructional strategies might use physical activity as a way to get children interested in the learning content.

In many schools, teachers have only control of what goes on in their classroom setting, and not the policies of the school. Teachers do not necessarily decide when they can take their students to P.E. and how long they stay there, this being outlined by the school's administrators. Nevertheless teachers can control what physical activity opportunities they allow in their classroom environment such as movement in the classroom.

Teachers can implement physical activity opportunities in the school environment in numerous ways that support overall development and maintain a healthy lifestyle for children. Teachers can incorporate physical activity in the classroom environment through music and dance, interactive learning centers, and using dramatic play when reading literature. Integrating science outdoors is a great way to get children active and learning through exploration of nature. Teachers should allow more time for free play

activities such as recess and not take away recess as a form of punishment to give children more physical activity opportunities. Teachers can enhance free play by planning physical activities and providing resources that stimulate children's learning and fine and gross motor skills. These resources can include jump ropes, large and small balls, and sidewalk chalk.

From the present study, school officials should gain a better understanding of why physical activity is important in a school setting and how school officials can provide teachers and student with resources and opportunities to implement physical activity. School administrators should hold themselves accountable to provide students with adequate physical education programs that are appropriate for all students.

Administrators can provide physical activity opportunities by allotting recess time for children of all ages from Kindergarten through 5<sup>th</sup> grade without decreasing the amount of time as they get older. Teachers should be allowed to provide children with extra recess opportunities outside of the school schedule. This will allow teachers to be able to implement physical activity outside of the classroom environment, giving children more unstructured physical activity opportunities throughout the day.

Preservice teachers learn ways to be an effective teacher through their teacher preparation program. The current study is an example to why teacher preparation programs should emphasize physical activity in the school setting. Through the teacher preparation program preservice teachers gain experience and confidence which may lead to a high sense of efficacy, but does not focus directly on the importance of incorporating physical activity into learning curriculum and the school environment. Teacher preparation programs can help prepare preservice teachers to plan for physical activity

opportunities in their classroom by educating them on how physical activity can enhance children's academic learning. The teacher preparation program can also teach preservice teachers how to integrate physical activity into children's everyday learning. By educating teachers about the benefits of physical activity in the school and classroom environment preservice teachers will be more confident to implement physical activity in their future classrooms.

The researcher was not able to conclude whether preservice teachers who believe and value physical activity as important in the school environment also engage on behavior management practices that take away physical activity opportunities as a form of punishment/consequence. Results from the current study show that preservice teachers highly believe in and value physical activity opportunities, but the findings do not show if their actions reflect their beliefs.

Another limitation in the current study is the small sample size and lack of diversity within the sample. The sample consisted of 72 participants who were all female and primarily white living in the same geographic location. If there was a larger sample size, the study would have a more diverse range of participants and results. We might see a difference in responses due to location and ethnicity. Examining only preservice teachers for the current study is also a limitation due to the lack of experience the participants have as teachers. The lack of experience of these preservice teachers could yield different findings of the values and beliefs of physical activity and a teachers sense of efficacy from teachers who have been teaching in a classroom setting for multiple year and are experienced educators.

Researchers could further explore whether the block or semester that a preservice

teacher is currently in has an effect on their values and beliefs of physical activity, their use of physical activity as a form of punishment/consequence, and their sense of efficacy pertaining to their class. This analysis may show that preservice teachers who are in block 4, their final semester, have a higher sense of efficacy than a preservice teacher who is just starting in the program at block 1. Results might also show that as preservice teacher progress through the program, their values and beliefs of physical activity might change and also the use of physical activity as a form of punishment. This change might be due to preservice teachers having an idea of what they believe in, but then their beliefs change once they have gained more experience in the classroom setting. By conducting further research on preservice teachers' progression through the Early Childhood Program, researchers can use the information to determine whether preservice teachers' values and beliefs along with sense of efficacy alter as they continue throughout the program.

Future research can also examine taking away physical activity as a form of punishment/consequence with a scale that is more reliable. In the current study, only three items in the scale pertained to taking away physical activity. The current scale could be modified to include more items pertaining to taking away physical activity that could lead to a more reliable scale for further research.

It is important to examine the values and beliefs of preservice teachers' regarding physical activity because the need for physical activity is very prevalent in schools. Teachers believe physical activity opportunities should be given in the school environment, but are assigned time for their students to participate in recess and P.E. Children are not receiving these physical activity opportunities because schools are



focusing on academic learning rather than the child's overall development. However, teachers can implement movement in their classroom that not only allows children to be physically active, but also has academic gains. A teacher's teaching style can have a direct impact on a child's health by increasing physical activity opportunities in the classroom.

The current research study explains that teachers who have a high sense of efficacy in their teaching abilities believe physical activity is important in the school setting, indicating that teachers who are more confident may implement physical activity into their academic curriculum. With more physical activity opportunities children are able to maintain a healthier lifestyle and decrease the ongoing trend of childhood obesity. Thus, it is more important than ever for teachers to implement physical activity in their classroom and school setting for children to receive the overall educational experience they deserve to continue as lifelong learners.

## REFERENCES

- Ashton, P. T., & Webb, R. B. (1986). *Making a difference: Teachers' sense of efficacy and student achievement*. White Plains, NY: Longman.
- Bandura, A. (1994). Efficacy. In V. S. Ramachaudran (Ed.), *Encyclopedia of human behavior* (Vol. 4, pp. 71-81). New York: Academic Press. (Reprinted in H. Friedman [Ed.], *Encyclopedia of mental health*. San Diego: Academic Press, 1998).
- Bandura, A. (1997). *Efficacy: The exercise of control*. New York: W. H. Freeman and Company.
- Barros, R. M., Silver, E. J., & Stein, R. K. (2009). School recess and group classroom behavior. *Pediatrics, 123*, 431-436. doi:10.1542/peds.2007-2825
- Beaulieu, L., Butterfield, S. A., & Pratt, P. (2009). Physical activity opportunity in United States public elementary schools. *Physical Activity, 4*, 33-36. doi:0.1016/j.ypped.2009.06.011
- Borg, M. (2001). Teachers' beliefs. *English Language Teaching, 55*, 186-188.
- Brown, J. E., Nicholson, J. M., Broom, D. H., & Bittman, M. (2011). Television viewing by school-age children: Associations with physical activity, snack food consumption and unhealthy weight. *Social Indicators Research, 101*, 221-225. doi:10.1007/s11205-010-9656-x

- Cardon, G. M., Van Acker, R., Seghers, J., De Martelaer, K., Haerens, L. L., & De Bourdeaudhuij, I. M. (2012). Physical activity promotion in schools: Which strategies do schools (not) implement and which socioecological factors are associated with implementation? *Health Education Research*, *27*, 470-483. doi:10.1093/her/cys043
- Castelli, D. M., Hillman, C.H., Buck, S.M., & Erwin, H.E. (2007). Physical fitness and academic achievement in third- and fifth-grade students. *Journal of Sport & Exercise Psychology*, *29*(2), 239–252.
- Ciyer, A., Nagasawa, M., Swadener, B., & Patet, P. (2010). Impacts of the Arizona system ready/child ready professional development project on preschool teachers' efficacy. *Journal of Early Childhood Teacher Education*, *31*(2), 129-145.
- Cleland, V., Timperio, A., Salmon, J., Hume, C., Telford, A., & Crawford, D. (2011). A longitudinal study of the family physical activity environment and physical activity among youth. *American Journal of Health Promotion*, *25*, 159-167.  
doi:10.4278/ajhp.090303-QUAN-93
- Copple, C., & Bredekamp, S. (2009). *Developmentally appropriate practice in early childhood programs serving children from birth through age 8*. (3 ed.). Washington DC: National Association for the Education of Young Children.
- Council on Physical Education for Children (COPEC) of the National Association for Sport and Physical Education. (2004). *Physical activity for children: A statement of guidelines for children ages 5–12*. (2nd ed.). Retrieved from <http://www.aahperd.org/naspe/standards/nationalGuidelines/PA-Children-5-12.cfm>
- Cousins, J., & Walker, C. (1995). Predictors of educators' valuing of systemic inquiry in schools. *Canadian Journal of Program Evaluation, Special Issue*, 25–35.

- DiGiacinto, K., & Jones, E. (2010). Create an adventure challenge: Using recess time to supplement physical activity during the school day. *Strategies: A Journal for Physical and Sport Educators*, 24, 30-32. doi:10.1016/j.jsams.2009.10.223
- Dills, A. K., Morgan, H. N., & Rotthoff, K. W. (2011). Recess, physical education, and elementary school student outcomes. *Economics of Education Review*, 30, 889-900. doi:10.1016/j.econedurev.2011.04.011
- Dunton, G., Kawabata, K., Intille, S., Wolch, J., & Pentz, M. (2012). Assessing the social and physical contexts of children's leisure-time physical activity: An ecological momentary assessment study. *American Journal of Health Promotion*, 26, 135-142. doi:10.4278/ajhp.100211-QUAN-43
- Elliott, S. (2011). Recess physical activity packs in elementary schools: A qualitative investigation. *Physical Educator*, 68, 150-162. doi:10.1103/PhysRevLett.107.168301
- Guskey, T. R. (1987). Context variables that affect measures of teacher efficacy. *The Journal of Educational Research*, 81(1), 41-47.
- Guskey, T. R. (1988). Teacher efficacy, self-concept, and attitudes toward the implementation of instructional innovation. *Teacher and Teacher Education*, 4, 63-69.
- Hammons, A. J., & Fiese, B. H. (2011). Is frequency of shared family meals related to the nutritional health of children and adolescents? *Pediatrics*, 127, e1565-e1574. doi:10.1542/peds.2010-1440
- Healthy People 2010. (2000, November). Leading Health Indicators. In *Healthy People 2010: Understanding and Improving Health*. In Healthy People 2010: Understanding and improving health. Retrieved October 13, 2012, from <http://www.healthypeople.gov/Document/tableofcontents.htm>

- Helgeson, J. (2011). Four simple ways to add movement in daily lessons. *Kappa Delta Pi Record*, 47(2), 80-84. Retrieved from <http://www.kpd.org/publications/archives/recordw11.php>
- Henson, R. K. (2001). The effects of participation in teacher research in teacher efficacy. *Teacher and Teacher education*, 17, 819-836.
- Hoy, A. (2004). The educational psychology of teacher efficacy. *Educational Psychology Review*, 16, 153-176.
- Huberty, J. (2011). Ready for recess: A pilot study to increase physical activity in elementary school children. *Journal of School Health*, 81, 251-257. doi:10.1111/j.1746-1561.2011.00591.x
- Ihmels, M. A., Welk, G. J., Eisenmann, J. C., Nusser, S. M., & Myers, E. F. (2009). Prediction of BMI change in young children with the family nutrition and physical activity (FNPA) screening tool. *Annals of Behavioral Medicine*, 38, 60-68. doi:10.1007/s12160-009-9126-3
- Jones, R. B. (2005). A cognitive approach to elementary school recess. *Teaching Elementary Physical Education*, 16, 33-34. doi:10.1007/0-387-24530-8\_5
- Mahar, M. T., Murphy, S. K., Rowe, D. A., Golden, J. A., Shields, T., & Raedeke, T. D. (2006). Effects of a classroom-based program on physical activity and on-task behavior. *Medicine and Science in Sports and Exercise*, 38, 2086–2094. doi:10.1249/01.mss.0000235359.16685.a3
- McCarron, D. A., Richartz, N., Brigham, S., White, M. K., Klein, S. P., & Kessel, S. S. (2010). Community-based priorities for improving nutrition and physical activity in childhood. *Pediatrics*, 126, 73-89. doi:10.1542/peds.2010-0482C

- McKenzie, T. P. (2010). Leisure-time physical activity in elementary schools: Analysis of contextual conditions. *Journal of School Health, 80*, 470-477. doi:10.1111/j.1746-1561.2010.00530.x
- McMurrer, J. (2008). NCLB year 5: Instructional time in elementary schools. Retrieved from <http://www.ceop-dc.org/displayDocument.cfm?DocumentID=309>
- Medina, J. J. (2008). Brain rules: 12 principles for surviving and thriving at work, home, and school. Seattle, WA: *Pear Press*
- Midgley, C., Feldlaufer, H., & Eccles, J. S. (1989). Change in teacher efficacy and student self- and task-related beliefs in mathematics during the transition to junior high school. *Journal of Educational Psychology, 81*, 247-258.
- Moore, W. P., & Essleman, M. E. (1992, March). *Teacher efficacy empowerment and a focused instructional climate: Does student achievement benefit?* Paper presented at the annual meeting of the American Educational Research Association, San Francisco, CA. (ERIC Document Reproduction Service NO. ED350252).
- Moser, C. (1982). Changing attitudes of student teachers on classroom discipline. *Teacher Educator, 18*, 10-15.
- Mota, J., Silva, P., Santos, M., Ribeiro, J., Oliveira, J., & Duarte, J. A. (2005). Physical activity and school recess time: Differences between the sexes and the relationship between children's playground physical activity and habitual physical activity. *Journal of Sports Sciences, 23*, 269-275. doi:10.1080/02640410410001730124
- Nielsen, G., Grønfeldt, V., Toftegaard-Støckel, J., & Andersen, L. (2012). Predisposed to participate? The influence of family socio-economic background on children's sports

- participation and daily amount of physical activity. *Sport in Society*, 15, 1-27.  
doi:10.1080/03031853.2011.625271
- No Child Left Behind Act of 2001, Pub. L. No. 107-110, § 115 Stat. 1425 (2002).
- Pajares, F. (1992). Teachers' beliefs and education research: Cleaning up a messy construct. *Review of Educational Research*, 62, 307-332.
- Patt, M. (2011). Starving for recess. *District Administration*, 47, 66-70. doi:10.1007/978-3-642-12171-5\_5
- Prentice-Dunn, H., & Prentice-Dunn, S. (2012). Physical activity, sedentary behavior, and childhood obesity: A review of cross-sectional studies. *Psychology, Health & Medicine*, 17, 255-273. doi:10.1080/13548506.2011.608806
- Richards, K. R., & Wilson, W. J. (2012). Quality assurance in physical education. *Strategies: A Journal for Physical And Sport Educators*, 25, 36-37.  
doi:10.1016/j.psychsport.2011.08.005
- Ridgers, N. D., Saint-Maurice, P. F., Welk, G. J., Siahpush, M., & Huberty, J. (2011). Differences in physical activity during school recess. *Journal of School Health*, 81, 545-551. doi:10.1111/j.1746-1561.2011.00625.x
- Ridgway, A., Northup, J., Pellegrin, A., LaRue, R., & Hightshoe, A. (2003). Effects of recess on the classroom behavior of children with and without attention-deficit hyperactivity disorder. *School Psychology Quarterly*, 18, 253-68. doi:10.1521/scpq.18.3.253.22578
- Robinson, L. E., & Wadsworth, D. D. (2010). Stepping toward physical activity requirements: Integrating pedometers into early childhood settings. *Early Childhood Education Journal*, 38, 345-365. doi:10.1007/s10643-010-0388

- Ross, J. A. (1992). Teacher efficacy and the effects of coaching on student achievement. *Canadian Journal of Education, 17*(1), 51-65.
- Ross, J. A. (1998). The antecedents and consequences of teacher efficacy. In J. Brophy (Ed.) *Advances in Research on Teaching. Vol. 7* (pp. 49-74). Greenwich, CT: JAI Press.
- Ross, J. A., Hogaboam-Gray, A., & Hannay, L. (2001). Effects of teacher efficacy on computer skills and computer cognitions of K-3 students. *Elementary School Journal, 102*(2), 141-156.
- Ryan, C. A., & Beighle, A. (2010). Resources for increasing physical activity in children and youth. *Strategies: A Journal for Physical and Sport Educators, 24*, 22-25.  
doi:10.1080/17408980902729370
- Sallis, J., & McKenzie, T. (2012). Physical education's role in public health: Steps forward and backward over 20 years and hope for the future. *Research Quarterly for Exercise and Sport, 83*, 125-135. doi:10.5641/027013612800745329
- Sanchez-Vaznaugh, E. V., Sánchez, B. N., Rosas, L. G., Baek, J., & Egerter, S. (2012). Physical education policy compliance and children's physical fitness. *American Journal of Preventive Medicine, 42*, 452-459. doi:10.1016/j.amepre.2012.01.008
- Shor, R., & Friedman, A. (2009). Integration of nutrition-related components by early childhood education professionals into their individual work with children at risk. *Early Child Development and Care, 179*, 477-486. doi:10.1080/03004430701269218
- Stellino, M. B., & Sinclair, C. D. (2008). Intrinsically motivated, free-time physical activity. Considerations for recess. *The Journal of Physical Education, Recreation & Dance, 79*(4), 37-40.



- Stoiber, K., & Gettinger, M. (2011). Functional assessment and positive support strategies for promoting resilience: Effects on teachers and high-risk children. *Psychology in the Schools, 48*, 686-706. doi:10.1002/pits.20587
- Tschannen-Moran, M., & Woolfolk Hoy, A. (2001). Teacher efficacy: Capturing and elusive construct. *Teaching and Teacher Education, 17*, 783-805.
- Tucker, P. (2008). The physical activity levels of preschool-aged children: A systemic review. *Early Childhood Research Quarterly, 23*, 547–558. doi:10.1016/j.ecresq.2008.08.005
- Vidoni, C., & Ignico, A. (2011). Promoting physical activity during early childhood. *Early Child Development and Care, 181*, 1261-1269. doi:10.1080/03004430.2010.523786
- Wachs, T. D. (2008). Multiple influences on children's nutritional deficiencies: A systems perspective. *Physiology & Behavior, 94*, 48-60. doi:10.1016/j.physbeh.2007.11.018
- Wadsworth, D. D., Robinson, L. E., Beckham, K., & Webster, K. (2012). Break for physical activity: Incorporating classroom-based physical activity breaks into preschools. *Early Childhood Education Journal, 39*, 391-395. doi:10.1007/s10643-011-0478-5
- Woolfolk, A. E. & Hoy, W. K. (1990). Prospective teachers' sense of efficacy and belief about control. *Journal of Educational Psychology, 82*, 81-91.
- Woolfolk, A. E., Rosoff, B., & Hoy, W. K. (1990). Teachers' sense of efficacy and their beliefs about managing students. *Teaching & Teacher Education, 6*, 137-148.
- Xiang, P., Lowy, S., & McBride, R. (2002). The impact of a field-based elementary physical education methods course on preservice classroom teachers' beliefs. *Journal of Teaching in Physical Education, 21*, 145-161

# APPENDICES

## APPENDIX A

### Demographic Questionnaire

1. What is your age? \_\_\_\_\_
2. Are you male or female?  
 Male  Female
3. What ECE block are you currently in?  
 Block 1  Block 3  
 Block 2  Block 4
4. How would you classify yourself?  
 Black/ African American  Hispanic/Latino  
 Asian  Native American  
 White  Other
5. What grade levels have you taught during your teaching experiences? Check all that apply  
 3 or younger  1st  
 Pre-Kindergarten  2nd  
 Kindergarten  3rd
6. How many students do you have in your current class? \_\_\_\_\_
7. Please indicate your religious affiliation:  
 Assembly of God  Church of the Nazarene  Pentecostal Holiness Church  
 Baptist  Episcopal  Presbyterian  
 Southern Baptist  Jehovah 's Witness  Reformed  
 Catholic Church  Latter Day Saints- Mormon  Seventh Day Adventist  
 Christian Church (Disciples of Christ)  Lutheran  Non- denominational  
 Christian Church (Independent)  Methodist  Other (specify) \_\_\_\_\_  
 Church of Christ  United Methodist Church

## APPENDIX B

### Early Childhood Physical Activity Values and Beliefs Scale

Please indicate the degree to which you agree or disagree with each statement

<b>How much do you agree with each statement</b>	<b>Strongly Disagree</b>	<b>Moderately Disagree</b>	<b>Slightly Disagree</b>	<b>Slightly Agree</b>	<b>Moderately Agree</b>	<b>Strongly Agree</b>
1. Physical activity makes important contributions to the development of the whole child.	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>
2. Physical activity allows children a fun break from regular school activities.	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>
3. Taking away students opportunities for physical activity is an appropriate form of discipline.	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>
4. Physical activity is an integral part of school education.	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>
5. Physical activity provides children opportunities to learn about health and fitness.	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>
6. Keeping students in during recess is an effective form of punishment.	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>
7. Physical activity is as important as other school subjects, such as English and Math.	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>
8. Recess takes away from children's academic learning.	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>

The Early Childhood Physical Activity Values and Beliefs scale is based on the Elementary Physical Education Values and Purposes (Xiang, P., Lowy, S., McBride, R., 2002) with added classroom management items.

9. Movement in the classroom takes away from children's academic learning.	1	2	3	4	5	6
10. Physical activity teaches children motor skills, such as running, jumping and throwing.	1	2	3	4	5	6
11. Teachers should integrate physical activities into their classroom curriculum.	1	2	3	4	5	6
	<b>Strongly Disagree</b>	<b>Moderately Disagree</b>	<b>Slightly Disagree</b>	<b>Slightly Agree</b>	<b>Moderately Agree</b>	<b>Strongly Agree</b>
12. Physical activity helps children develop social skills, such as sharing, taking turns, and cooperating with classmates.	1	2	3	4	5	6
13. Recess should be removed from elementary schools to allow more instructional time.	1	2	3	4	5	6
14. Physical activity is just about playing games and sports.	1	2	3	4	5	6
15. Teachers should integrate opportunities for physical movement to their math, science, social studies, and language arts lessons.	1	2	3	4	5	6
16. Physical activity is a time to be with friends, talk, laugh, and be silly.	1	2	3	4	5	6
17. Movement in the classroom is important.	1	2	3	4	5	6
18. Physical activity deserves more credit and time than given in most elementary schools.	1	2	3	4	5	6
19. Recess is a privilege and is something that should be earned.	1	2	3	4	5	6

APPENDIX C

**Teachers' Sense of Efficacy Scale (long form)**

<b>Teachers Beliefs</b>	<b>How much can you do?</b>								
	Nothing	Very Little	Some Influence	Quite A Bit	A Great Deal				
1. How much can you do to get through to the most difficult students?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
2. How much can you do to help your students think critically?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
3. How much can you do to control disruptive behavior in the classroom?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
4. How much can you do to motivate students who show low interest in school work?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
5. To what extent can you make your expectations clear about student behavior?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
6. How much can you do to get students to believe they can do well in school work?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
7. How well can you respond to difficult questions from your students?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
8. How well can you establish routines to keep activities running smoothly?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
9. How much can you do to help your students value learning?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
10. How much can you gauge students comprehension of what you have taught?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
11. To what extent can you craft good questions for your students?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
12. How much can you do to foster student creativity?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
13. How much can you do to get children to follow classroom rules?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
14. How much can you do to improve the understanding of a student who is failing?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
15. How much can you do to calm a student who is disruptive or noisy?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
16. How well can you establish a classroom management system with each group of students?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
17. How much can you do to adjust your lessons to the proper level for individual students?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
18. How much can you use a variety of assessment strategies?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
19. How well can you keep a few problem students from ruining an entire lesson?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
20. To what extent can you provide an alternative explanation or example when students are confused?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
21. How well can you respond to defiant students?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
22. How much can you assist families in helping their children do well in school?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
23. How well can you implement alternative strategies in your classroom?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
24. How well can you provide appropriate challenges for very capable students?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)

APPENDIX D

**Oklahoma State University Institutional Review Board**

Date: Monday, March 04, 2013  
IRB Application No HE1314  
Proposal Title: Early Childhood Education Pre-service Teachers' Beliefs About the Use of Corporal Punishment, the Importance of Physical Activity, and Perceptions of Children of Divorce  
Reviewed and Processed as: Exempt

**Status Recommended by Reviewer(s): Approved Protocol Expires: 3/3/2014**

Principal Investigator(s):

Julia T. Atilas	Jennifer Carnley	Mallory Oliver
233 HES	233 HS	233 HS
Stillwater, OK 74078	Stillwater, OK 74078	Stillwater, OK 74078

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The IRB application referenced above has been approved. It is the judgment of the reviewers that the rights and welfare of individuals who may be asked to participate in this study will be respected, and that the research will be conducted in a manner consistent with the IRB requirements as outlined in section 45 CFR 46.

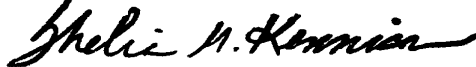
The final versions of any printed recruitment, consent and assent documents bearing the IRB approval stamp are attached to this letter. These are the versions that must be used during the study.

As Principal Investigator, it is your responsibility to do the following:

1. Conduct this study exactly as it has been approved. Any modifications to the research protocol must be submitted with the appropriate signatures for IRB approval. Protocol modifications requiring approval may include changes to the title, PI, advisor, funding status or sponsor, subject population composition or size, recruitment, inclusion/exclusion criteria, research site, research procedures and consent/assent process or forms.
2. Submit a request for continuation if the study extends beyond the approval period of one calendar year. This continuation must receive IRB review and approval before the research can continue.
3. Report any adverse events to the IRB Chair promptly. Adverse events are those which are unanticipated and impact the subjects during the course of this research; and
4. Notify the IRB office in writing when your research project is complete.

Please note that approved protocols are subject to monitoring by the IRB and that the IRB office has the authority to inspect research records associated with this protocol at any time. If you have questions about the IRB procedures or need any assistance from the Board, please contact Dawnett Watkins 219 Cordell North (phone: 405-744-5700, dawnett.watkins@okstate.edu).

Sincerely,



Shelia Kennison, Chair  
Institutional Review Board

VITA

Jennifer Carnley

Candidate for the Degree of

Master of Science

Thesis: PHYSICAL ACTIVITY: VALUES AND BELIEFS OF PRESERVICE  
EARLY CHILDHOOD TEACHERS

Major Field: Human Development and Family Sciences

Biographical:

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- Facilitated lectures
- Graded assignments

**ECE Primary Student Teaching** Spring 2012  
Perkins-Tryon Elementary School Perkins, Oklahoma

- Assisted and/or led everyday classroom lessons in 2<sup>nd</sup> grade
- Planned, prepared, and taught a two-week integrated unit

**ECE Pre-K/K Student Teaching** Fall 2011  
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- Assisted and/or led everyday classroom lessons
- Planned, prepared, and taught a two-week integrated unit