

A QUALITATIVE COLLECTIVE CASE STUDY INVESTIGATING THE MOTIVATIONAL  
FACTORS OF ELEMENTARY-AGED STUDENTS IN PHYSICAL EDUCATION CLASS  
AND LEISURELY PHYSICAL ACTIVITY

by

Jesse Beam

Liberty University

A Dissertation Presented in Partial Fulfillment

Of the Requirements for the Degree

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APPROVED BY:

Judy Sandlin, Ph.D., Committee Chair

Larry Crites, Ed.D., Committee Member

Vista Rainey, Ph.D., Committee Member

Scott Watson, Ph.D., Associate Dean, Advanced Programs

## **ABSTRACT**

The purpose of this qualitative collective case study was to increase understanding of the influential motivating factors of elementary-aged students in physical education (PE) that foster positive reinforcement to manage student engagement. The study was conducted at three different elementary schools in a school district in the southeastern United States. To determine the factors that influence the students' motivation in PE and leisurely physical activity, a set of data collection sources was used. Student interviews, caregiver surveys, and teacher journal entries were utilized to collect purposeful data that identified the specific factors associated with participation. Data was then transcribed and coded to identify reoccurring themes across the cases. The study found multiple factors associated with PE engagement and leisurely physical activity involvement, which are: (a) incentives play a role in motivation; (b) organized and leisurely physical activity foster positive relationships among peers; (c) bullying negatively affects students' motivation; (d) leisurely family activities foster higher engagement levels in children; (e) access to parks, recreational facilities, and youth sports leagues play a role in leisurely physical activity levels; (f) caregivers' involvement in their child's education allows communication between teacher and caregiver to strengthen the PE program; (g) the effectiveness of the classroom management of the teacher ensures all students are provided with an education that is safe and fair; (h) the teacher's ability to use incentives appropriately increases the likelihood of the most desirable behaviors; and (i) consistent school-wide application of the PBIS model reinforces positive student outcomes.

*Keywords:* positive reinforcement, physical education, childhood obesity, motivation

## **Dedication**

I have to dedicate this manuscript to the individuals who have motivated, guided, and loved me throughout the years. First, I must acknowledge the number of times my mother has reviewed my work and responded positively to the late evening calls to edit a paper. It is an undeniable fact that, without her willingness to offer criticisms, I would have never made it this far. In addition to her efforts, I have to thank my father who has provided a special balance between my doctoral work, teaching career, and family responsibilities. He has reminded me that, while pursuing an advanced degree is important, my family and faith should be my top priority. My own family has been so understanding and inspiring. To my wife, Randi, I am so thankful for the person I have become because of you. The late evenings of writing, the times you have taken Braylon for the day, and your inspirational words have made my efforts seamless. To my son, Braylon, I have watched you grow into a fine young man, and I promise that, when this degree is conferred, I will make the extra effort to make up for the time lost. I love you both and thank God for blessing me with you in my life. Finally, I dedicate this work to Our Lord and Savior, Jesus Christ. I believe he has directed me to Liberty to increase my knowledge of Christianity and faith in Him.

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### **List of Abbreviations**

Body Mass Index (BMI)

Institutional Review Board (IRB)

Master Motivational Climate (MMC)

National Association of Sport and Physical Education (NASPE)

Neighborhood Environment Walkability Scale (NEWS)

Physical Education (PE)

Positive Behavior Interventions and Supports (PBIS)

Parent-Teacher Organization (PTO)

Schoolwide Positive Behavior Support (SWPBS)

Self-Determination Theory (SDT)

Summers Are for Exercise (SAFE)

Zone of Proximal Development (ZPD)

## **CHAPTER ONE: INTRODUCTION**

Chapter One provides a thorough background of the necessity of conducting research to investigate the factors that motivate and demotivate elementary-aged students in physical education (PE) and leisurely physical activity. Childhood obesity is identified as a growing problem for the youth of America; additionally, the importance of students being highly motivated to embrace physical activity was investigated. Obesity, positive reinforcement, physical activity, and PE are popular terms that were clearly identified and delineated to establish a strong foundation to the study.

### **Background**

Obesity, an evolving issue, has a detrimental effect on the lives of the individuals who are identified in this category. Han, Lawlor, and Kimm (2010) suggested that over the last 30 years, the number of obese or overweight children has increased to more than 40% of North American young people. Obesity leads to other health problems, including diabetes, hypertension, cancer, and cognitive dysfunction (Mithcell, Catenacci, Wyatt, & Hill, 2010). Childhood obesity is at an all-time high, and, of the variety of factors that may have contributed to this rate of obesity, physical inactivity is a major contributor. Children's physical activity has decreased, resulting in a serious health problem for the youth of America (Rahman, Cushing, & Jackson, 2011). As this problem continues to escalate, a plan must be implemented to solve the problem through legislation from policy-makers and through health professionals (Dodson et al., 2009). To increase understanding of positive reinforcement influences and other factors that motivate and demotivate students' desires to engage in PE and physical activity, this study will investigate the perceptions of students, teachers, and parents as related to these factors. The results of this study can be used to identify existing problems so that adjustments to current PE curriculum designs can

be implemented. Additionally, the influential factors that impact leisurely physical activity will also be identified.

In addition to health implications, obesity also has a negative impact on a child's psychological health. Puder and Munsch (2010) noted that obese children experience high levels of emotional stress. The psychological impact can be difficult to overcome and harmful to the individual (Eisenberg, Neumark-Sztainer, & Story, 2003). Sullivan (2010) summarized the emotional complications of childhood obesity as low self-esteem, depression, anxiety, isolation; and sleep problems as a result of the complications.

Childhood obesity not only has a negative impact on the lives of the people who are burdened with the problem, but has a direct impact on healthcare costs for the United States taxpayers as well. If an obese individual is incapable of affording insurance or relies on governmental assistance, then the taxpayers are burdened with the costs (Bhattacharya & Sood, 2011). However, obesity rates and the resulting costs can be reduced, especially if the appropriate actions take place at the foundations of a child's early experience of physical activity. One crucial step toward reducing childhood obesity could be identifying specific factors associated with the use of positive reinforcement in elementary PE programs to maximize the motivational levels of students in PE and leisurely physical activity.

An underlying factor that leads to childhood obesity is the limited intensity and duration of physical activity a young person experiences regularly. In addition, the motivation to be physically active may be low for some elementary-aged students. Typically, there are individuals who enjoy PE and others who dislike the class. Ntoumanis (2001) found students are more active in PE and leisure activities when they are motivated by the content. In order to encourage the reluctant students, the first essential step was to identify the students' experiences that may

explain their motivation to participate in PE and regular physical activity. Research indicates that adverse experiences cause students' motivation levels for physical activity to diminish. From a sample size of 44 parents and 47 adolescents, Weidong, Rukavina, Sutherland, Bo, and Kim (2012) found that the lack of choices and unentertaining lessons in PE negatively impacted student engagement levels. As a result, the students withdraw from PE and fail to obtain the recommended amount of daily physical activity to reduce weight issues. Negative experiences in PE can be prevented or reduced by creating a positive learning environment that is void of negative motivating factors.

To increase appropriate behaviors and decrease inappropriate behaviors, Partin, Roberson, Maggin, Oliver, and Wehby (2010) suggested using teacher praise to allow students to respond correctly to academic demands. Gaining a better understanding of positive reinforcement will provide supportive documentation on how students are motivated by positive influential motivating factors. In addition, the results of the study can be used to increase students' desires to value PE and engage in regular physical activity.

The study was conducted at sites which use positive reinforcement to persuade students to use acceptable behavior and to reinforce more desirable outcomes. The research study adds to the current literature regarding the influencing motivation factors in an elementary PE environment to better understand positive reinforcement based on the perceptions of students, teachers, and caregivers. Token economies have become popular forms of positive reinforcement in PE classes that have yielded desirable outcomes. Alstot (2012) acknowledged positively reinforced token economies can be an effective tool, but they do have certain drawbacks in terms of the reinforcements being awarded. If the students do not value the reinforcements being offered and their choices are limited, then the positive reinforcement token economy will

collapse; consequently, there is a significant chance that many positive behaviors will go ignored and the students' positive behavior will not be reinforced (Drabman & Tucker, 1974).

Additionally, if PE programs highlight students' weaknesses and fail to entertain students, then the students may opt out of physical activity; thus further proving the necessity to study the influencing factors (Griffin, Meaney, & Hart, 2013).

To increase understanding of the influential motivating factors in physical education, I explored the possible factors that prevent students from actively engaging in PE and leisure physical activity. In addition, I wanted to increase understanding of the role positive reinforcement plays on the students' perceptions of PE and physical activity, identify the factors that hinder participation, and the factors that increase physical activity immersion. Gutierrez, Ruiz, and Lopez (2010) explained that there is a need to examine students' motivation for participation in PE and the elements of physical activity. Additional research should examine how an individual's motivation for PE predicts detachment from activity in PE class and free time (Ntoumanis & Standage, 2009). This study provides data that adds to existing literature to improve the PE experience for all individuals who are not motivated to be physically active in or out of the class setting.

### **Situation to Self**

Even as a young individual, I have always been interested in healthy living. I believe that personal goals should be a reflection of one's health beliefs. Most importantly, if a person fails to make healthy decisions throughout his life, then there are complications, which impact one's quality of life. The complications of poor health choices range from physical issues to problems interacting with peers. I have witnessed personally students who endure bullying and other

negative implications as a result of being obese. As a result, I have a passion to improve a young person's experiences as related to PE and physical activity.

Taking a social constructivism worldview, this research relies on the participants' views and perceptions of the situation (Creswell, 2007). As the researcher, I made ontological, epistemological, axiological, rhetorical, and methodological philosophical assumptions. This was accomplished by quoting participants and identifying themes based on the perceptions of the participants. In addition, I spent time with the student participants by meeting with them prior to the study. Under the axiological assumption, I used my own interpretations based on my own knowledge during the assertion stage. Using a first person perspective made the research personal and aligned with a rhetorical assumption. Finally, following a methodological assumption design required that I expect changes within my research questions to improve the quality of the design (Creswell, 2007).

From a professional perspective, physical educators and health professionals are entangled in a difficult struggle; fitness enthusiasts are forced to compete with various obstacles to motivate young people to participate in PE and regular physical activity, outside of school. Furthermore, physical educators have to find innovative methods to guide students that are not motivated to engage in PE and physical activity. Assuming the students participate in PE, their willingness to engage must be symbolic of a higher motivation.

### **Problem Statement**

A portion of America's youth has succumbed to unhealthy habits that have contributed to higher childhood obesity rates within the United States. Childhood obesity is one of the most significant problems in the country leading to future health implications, such as diabetes, cardiovascular diseases, joint problems, and psychosocial problems (Ernst et al., 2012).

Childhood obesity is a growing epidemic among the youth of America and is now identified as a national crisis (Tuckson, 2013). The lack of daily, moderate-to-vigorous physical activity has a devastating impact on obesity levels of America's youth; however, early interventions consisting of physical activity lead to more positive perceptions toward fitness (Mazzeo, Arens, Germeroth, & Hein, 2012). Students who fail to engage in regular physical activity and are not enthusiastic about PE develop severe health complications (Gutierrez, Ruiz, & Lopez, 2010, including psychological problems associated to obesity (Sullivan, 2010). Mooney (2012) argued that youth physical inactivity is dangerous because these individuals are also likely to remain inactive in their adult years. Additionally, adolescents who do not embrace physical activity have a higher probability of being overweight or obese (Guinhouya, 2012).

Obesity has a damaging long-term influence in lives, including social issues, chronic diseases, and most importantly, a higher mortality rate (Patterson, Moore, Probst, & Shinogle, 2004). To combat this problem, the American education system must be proactive to discover new strategies that will create a quality PE environment appropriate for all learners, especially to motivate the students who are reluctant to engage in PE or leisurely physical activity.

Positive Behavior Interventions and Supports (PBIS) rely on the use of rewards to reinforce desirable behaviors and to praise the accomplishments of the students (Reinke, Herman, & Stormount, 2013). The results are inconclusive on how positive reinforcement in PE overcomes the influential factors that demotivate young people. Developing an understanding of the factors that motivate or demotivate students in PE provides valuable data to determine the necessity of using positive reinforcement to help students improve their experiences in class.

The southeastern United States tops the charts for obesity rates that continue to grow. According to Trust for America's Health (2011), nine of the top 10 states with the highest

obesity rates are in the South. Although 75% of children in North Carolina participate in some organized team sports and other voluntary physical activities outside of school, on a national level, an alarming rate of 31.4% of children 10-17 are obese (Child and Adolescent Health Measurement Initiative, 2012). Statistics have also concluded that Lincoln County, which is the targeted school system for this study, has more than 15% of children ages 5-11 labeled obese (Eat Smart, Move More: North Carolina, 2009). The first step to preventing and treating childhood obesity is to motivate young people to embrace a healthy lifestyle. Although a nutritional diet is critical, regular physical activity is also a major component to live a healthy life. Obesity can be prevented and treated by implementing a healthy lifestyle. PE teachers need to identify the influential factors that motivate and demotivate active participation.

### **Purpose Statement**

The purpose of this collective case study was to identify the influential factors of third-grade students at three elementary schools in North Carolina that use PBIS to deploy positive reinforcement to motivate students to engage in PE and leisurely physical activity. PBIS is a popular behavior modification system designed to eliminate problematic behavior and increase prosocial behaviors (Reinke et al., 2013). Under the parameters of PBIS in PE, motivation is defined by an individual's positive behavior to participate in PE and physical activity outside of class. Chen, Chen, Sun, and Zhu (2013) noted that motivation is an energy that is channeled in a desired direction. In terms of leisurely physical activity, an individual's energy expenditure in physical movement is physical activity. The National Heart, Lung, and Blood Institute (2011) identifies physical activity as any movement that requires more muscle movements than rest. Identifying the most common motivating and demotivating factors will assist PE teachers and caregivers to prevent young people from having a poor perception of PE and physical activity.

### **Significance of the Study**

Field Elementary School (pseudonym), Gorge Elementary School (pseudonym), and Lauder Elementary School (pseudonym) utilize PBIS to reinforce behaviors that align with school rules and classroom procedures. As a result, the student populations are primarily conditioned by positive reinforcement for completing tasks and objectives as a class and individually. The token-economy system rewards classes for meeting a high standard of expectations, while motivating them to maintain a certain behavior in order to receive tokens that are redeemed for class rewards. Relying on positive reinforcement, the schools' climate motivates students to conduct themselves in a suitable fashion.

According to Reinke et al. (2013), there are more than 14,000 schools in the United States that have adopted a form of PBIS; and the program has been found to decrease undesirable behaviors. The use of positive reinforcement token-systems is considered to improve students' attitudes and perceptions of school; however, it is unclear if the students' opinions of PE or their desire to increase physical activity levels are altered. In his study, Allstot (2012) concluded there are multiple benefits of a token-system in second- and third-grade PE, and he recommended a token-system be implemented in higher-grades to determine the effectiveness of rewards. However, I desire to examine the motivational influences based on the students' experiences to validate his findings and add to the available literature. The efficiency of positive reinforcement is not the primary focus of this study: it is to discover the role it plays to overcome the factors that motivate or demotivate the students' engagement in class and regular physical activity outside of school. On the other hand, using only positive reinforcement does not allow the teacher to punish a student who is defiant in terms of participation levels in class. Bambara, Goh, Kern, and Caskie (2012) concluded that one common barrier for PBIS was teachers' strong

agreement that students' problematic behaviors should be punished. Teachers' mixed opinions can impact the merit of a PBIS system or positive reinforcement strategies. As a result, determining the value of positive reinforcement will assist physical educators in developing superior strategies to motivate students with weight issues.

Relating to physical activity, a young person's perception of a particular subject affects his motivation. Quality PE requires students to participate on a regular basis and uses specific physical activities to fulfill daily activity recommendations. Students who are not motivated to immerse themselves in PE do not appreciate physical activity. Students' attitudes determine their participation levels in PE, and lower skilled students choose to sit out, (Silverman & Subramiam, 1999). Lower skilled students are often not as motivated because of the fear of being unsuccessful. If using positive reinforcement can influence the lower skilled students to participate, then it will be an influential factor that must be considered as a possible solution to increase participation levels in children. Most importantly, if students, caregivers, and teachers articulate that positive reinforcement strategies have assisted in overcoming demotivating factors in PE, then young people will likely implement more daily physical activity in their lives.

### **Research Questions**

The overall goal of this research study was to increase the understanding of the influential motivating factors of students to engage in PE and leisurely physical activity in school PE programs that make use of the positive reinforcement strategies of PBIS. Research questions focusing on the activity levels of the child, the role of the caregiver, and the role of the teacher made it possible to identify the factors that influence students to participate in PE and leisurely physical activity. To accurately analyze the elementary-aged students' motivation, the primary research question facilitated the research study:

**RQ1:** What factors positively influence elementary school students to be physically active and engage in PE classes?

The research required the use of secondary questions to identify the elements associated with the correlation of motivation and physical activity. These were used to further facilitate the process:

**RQ2:** What factors do students identify as significantly influencing their motivation to be physically active?

**RQ3:** What is the role of caregivers in their children's motivation to be physically active?

**RQ4:** How can educators influence students' motivation to be physically active through positive reinforcement?

### **Research Plan**

To thoroughly understand the motivational factors of the participants in a PE class, a collective case study design (Stake, 1995) was used. The primary benefit of a collective case study is the ability to analyze within each setting and across settings (Baxter & Jack, 2008). To analyze the settings properly and the family dynamics of each student, each student was recognized as a case. This allowed the research to analyze how the dynamics of the home environment impact leisurely physical activities. The students' realities of PE provided a stronger understanding of motivation to identify the factors that exist in PE that need to be identified for the benefit of all stakeholders. Additionally, the caregivers and teachers provided a different point of view of the possible factors associated with the motivation levels of students in PE and leisurely activities. To better understand the phenomena of students' motivation in PE and leisurely physical activities, I used three data collection sources. Student interviews, teacher journals, and caregiver surveys was used to identify the major themes relating to the motivational factors in physical education.

I conducted a pilot study to ensure that all of the participants comprehended the terminology being used within the data collection methods. Edwin and Hundley (2002) noted the purpose of a pilot study was to identify the where the research may fail and help refine the data collection methods that may be too complicated for the participants to understand. At first, I selected a student and parent participant at a convenient school site, within the same school district. The student completed the Likert scale, and then I conducted a two-part interview to evaluate the difficulty of the interview questions. At the same time, I had the student's caregiver complete the teacher questionnaire. Once completed, I reviewed the answers to make certain that the questions were not confusing or misunderstood. Additionally, I asked the student and caregiver participants if they did not understand any wording on the collection method. I also had a retired elementary PE teacher to review the journal prompts for clarity.

Following the pilot study, I used a Likert scale as a form of purposive-criterion sampling (Patton, 1990) to identify the student participants who have similar experiences (Stake, 2006). This was completed at three different sites within the school district. By following Stake's (2006) techniques, I was able to identify the various motivating factors in different environments and interpret the data to yield valuable information for the purpose of improving physical education and leisurely physical activity levels of young people. Furthermore, the caregiver of the student completed a questionnaire and the student's PE teacher answered journal prompts.

### **Delimitations**

The study was limited to third-grade student participants who attended Title-1 elementary schools in a small city in North Carolina. This study was completed to build on previous research conducted by Alstot (2012), who studied the impact of a token economy as a means of positive reinforcement on elementary students' achievement levels. Eighteen third-grade student

participants took part in the data collection methods, six students from Field Elementary, six students from Gorge Elementary, and six students from Lauder Elementary. Eighteen participants provided an equal representation of students' experiences in different PE classes. To establish equal gender representation, nine male and nine female third-grade students participated in the study. The study had the three most common ethnic groups at each site represented, African-American, Hispanic, and Caucasian. In addition to the student participants, three PE teachers, one from each elementary school, participated to gain a different perspective. Finally, one caregiver for each student completed a questionnaire regarding his or her perceptions of PE and physical activity.

The findings have limited transferability. The findings are from students at three elementary schools with different physical educators in schools that are comprised of a low socio-economical population. The results cannot be used to represent individuals in middle or secondary grade levels, nor can they be a fair reflection for all students in PE.

## **CHAPTER TWO: LITERATURE REVIEW**

### **Overview**

This chapter discusses the relevant literature relating to play, childhood obesity, and positive reinforcement in physical education (PE). Additionally, the chapter offers an insight to the multiple theorists' perspectives of play and the Self-Determination Theory (SDT) to provide a direction to the research. Most importantly, the terms that are reviewed to provide a framework to the study are childhood obesity, PE, and positive reinforcement. Clearly defining the theories and terms will provide the necessary background to identify a concrete purpose for investigating the influential motivating factors in a positively reinforced elementary class and to determine if the factors govern students' motivation levels in PE and extracurricular physical activity participation.

### **Theoretical Framework**

The theoretical framework was comprised of prominent theories that relate to play, physical activity, and PE. To better understand the phenomenon, Piaget's (1962) and Vygotsky's (1978) theories of cognitive development through play and Deci and Ryan's (2008) SDT were discussed to understand the phenomenon more clearly. These theories play a significant role in students' motivation toward physical education, physical activity engagement, and motivation levels.

### **Theories of Play**

Play is an essential element of a young person's growth and development. Milteer and Ginsburg (2012) classified active play as a central theme of childhood which is arguably one of the most important elements of healthy development. Gilmore (1966) identified play as the most common activity for children that allows freedom of expression and affords insights of cognitive

development. Play as a freedom of expression also allows children to learn through discovery. Fredrich Froebel defined play as a part of life; it allows children to act without threats of repercussions (Guttek, 2005). Play is an inalienable right to act and learn through authentic interactions with others or simply by themselves. Children are naturally inquisitive and take the opportunity to investigate their environment and other children; as a result, they indicate how these interactions lead to new and broader insight to various concepts (Britt, 2000). Defining play as generated by internal motivation with no desire to pursue external goals, Corbeil (1999) described the characteristics of play as freely chosen, pleasurable, unproductive, challenging, symbolic and controlled by rules, and differentiated from reality. Play can be used to motivate learners to embrace physical activity and increase their regular activity levels. Furthermore, the act of play has a major impact on the early developmental stages of children.

**Aspects of play.** Major theorists who have contributed to the study of psychology are Jean Piaget and Lev Vygotsky. In terms of play, these theorists have articulated its purpose in children's lives. Piaget (1962) and Vygotsky (1966, 1997) theorized that play contributes in cognitive development, creativity, innovation, and adaptive flexibility (Kolb & Kolb, 2010). Cognitive development, creativity, and problem-solving are some of the most valuable factors resulting from play. Additionally, a positive experience of play can influence a child's development in the early stages in life. Sheridan, Harding, and Meldon-Smith (2002) identified the following aspects of play: physical, cognitive and symbolic, linguistic and symbolic, emotional and social, and moral and spiritual.

Specific learned skills are necessary to ensure a child's capability of functioning and progressing through developmental stages of childhood to becoming proficient at specific motor skills in their school years. In young children, the use of play aids a child's development relating

to these motor skills. Mastering basic motor skills are building blocks for future and advanced physically active endeavors (Clark & Metcalfe, 2002; Robinson, Webster, Logan, Lucas, & Barber, 2012). According Robinson et al. (2012), the execution of fundamental motor skills is primarily what movement is based upon for individuals in the early childhood stage. Logan, Scrabis-Fletcher, Modlesky, and Getchell (2011) conducted a study to determine the correlation of motor skill proficiency and body mass index (BMI) in preschool children. Logan et al. (2011) concluded that children who lack proficient motor ability are typically inactive. As a result, the same children have a greater probability of being overweight or obese. Additionally, in an overweight individual, the possibility to master specific motor skills is lessened because of the lack of opportunities to practice a skill that requiring physical activity.

Play also contributes to increasing strength and coordination. Strickland (2004) emphasized that play which requiring organized, specifically timed movements helps compensate for curricula that fails to create standards for increasing coordination and strength. Elkonin (2005) classified fantasy and a deep immersion in creation as two features of play for children who are actively involved in the stages of play.

Jean Piaget's theory of play has been labeled comprehensive and definitive in developmental psychology (Fink, 1976). Humans of all age levels prosper intellectually with positive interactions within their environment. PE requires students to interact socially with their peers, teachers, and with equipment on a regular basis. Kolb and Kolb (2010) reiterated that Piaget believed play allows students to create their own knowledge about the world by interacting with the environment. Play is not the simple act of joyful entertainment; instead, it is through specific stages of play that children progressively advance, beginning at an early age. Piaget (1962) theorized that play consists of three different types: practice play, symbolic play,

and games with rules. Play inevitably can guide participants to higher-order thinking and improved cognitive structuring. On the other hand, the cognitive structuring is actually an extension of what is already known based on new experiences (Gordon & Esbjörn-Hargens, 2007). DeVries and Kohlberg noted that Piaget defined active education as the intentional social process of constructing understanding (as cited in Chaille & Silvern, 1996). Chaille and Silvern (1996) also contended that active education is comprised of interest, play, genuine experimentation, and cooperation. Acknowledging these elements can guarantee a degree of learning is achieved with active education.

Early in their lives, young people have their first experiences with play. Practice play is a process of assimilation and nascent accommodation (Casby, 2003). Aqeel and Awwad (2013) expressed that the ongoing process of assimilation leads to development, and the active response results in intellectual growth due to involuntary stimuli. The act of conceptually transforming people, things, or occasions, or performing something as if it were true is symbolic play (Shore, 2006). These stages of play are comprised of basic identification and sensory motor skills. During practice play, children ages 2 months to 18 months learn coordination, action patterns, and sensorimotor skills (Casby, 2003). Between the ages of 18 months and 4 years, the child learns combinations, identification skills, and projection skills of new objects as part of the symbolic play stage (Casby, 2003). Gilmore (1966) summarized Piaget's early stages of play as the child's desire to uncover new ideas in the cognitive development stage. Also, play only exists when the child is in a condition of enjoyment; otherwise, the child is focused and learning reduces the aspect of play.

As students begin to enter their elementary years of education, they are exposed to one of the final stages of play, which are games with rules. Based on Piaget's (1962) disposition, this is

the point that play no longer is considered play because an element of learning is required. Although Piaget does not associate learning with a component of play, the perceptions of children are different. In a study that conceptualized the meanings of play, Glenn, Knight, Holt, and Spence (2012) grouped the children's responses into four categories: movement focused activities, inventive activities, entertainment and traditional games, and social activities. The participants identified any activity as a form of play. This theory challenges Piaget's (1962) thoughts of play ceasing when learning is required; however, this is from the perspective of the child. In summary, play ends when it is no longer fun for the participant (Glenn et al., 2012). Games with rules have the potential to remain play in the sight of the participant, but the entertainment component determines one's perspective.

Games with rules is the final stage of Piaget's (1962) cognitive development theory of play. It is this stage that requires students to begin following a set of rules to play organized physical activities. Interestingly, the transition into this stage that requiring socialization negates cognitive growth. Piaget noted that this shift from symbolic play to this stage is not vital to the mind because it does not pertain to the mind. On the other hand, the opportunity to socialize should not be deemed unimportant; most importantly, the chance to prevail in a challenge over others is imperative. Piaget identified that individuals achieve intellectual and sensory motor satisfaction in competitive situations; however, these satisfiers are only possible because of the rules governing fair play. Piaget's work uncovered psychology of new issues from his desire to question the correlation of knowledge and values versus logical necessity and moral obligation (Lourenco & Machado, 1996).

Vygotsky (1978) stressed that play is a cognitive development stage that permits children to create their zone of proximal development (ZPD). Under the ZPD, the learner retains

information and knowledge based on the interactions and surroundings within the environment through challenging lessons. Specific to education, the ZPD is dependent on knowledgeable individuals, such as teachers, specialists, and peers assisting in the learning development throughout a lifetime. The ZPD distinguishes the human race as the only species to systematically use teaching and strive to better understand the factors that are interconnected with quality teaching (Bruner, 1997). Based on Vygotsky's perspective, individuals working in a cooperative effort develop a greater understanding of new concepts, skills, and mental development due to the positive instruction the lesser skilled individuals receive from the more advanced learners (Smith, 2009). Vygotsky believed play, a combination of affective and cognitive aspects of development, related to fulfillment of the impossible; consequently, it is the leading source of development for preschool children (Smith, 2009).

Contrary to Piaget, Vygotsky believed pretend play is the biggest factor in development (Smith & Lilliard, 2012; Vygotsky, 1967). Pretend play is diminished during the introduction of rules with games. Cognitive development through play is an element agreed upon by both Piaget and Vygotsky. Piaget (1962) noted that, at the age of seven, children cease pretend play; and Vygotsky (1967) identified school age as this period (Smith & Lilliard, 2012). A ZPD is generated for the child by play. Additionally, it is during play that children act differently, older, and more intellectually advanced (Gray & Feldman, 2004; Vygotsky, 1978). If students' skills are improved by peer interactions and achievement levels are increased, then ZPD is closely related to the influential factors associated with PE engagement.

Despite various parallels between the two theorists' principles, there is a fundamental difference regarding the baseline components of their theories. Lourenco (2012) investigated the developmental origins, peer interactions, and monitored changes in student growth based on

relevant or personal knowledge and the impact it has on the phenomena. These components, the foundation of the two theorists' philosophies, create both similarities and differences. Lourenco emphasized commonalities in theories, stressing a dialectical and a non-reductionist approach, a progressive viewpoint, the importance of the internal workings over external contents, and the superiority of qualitative deviations compared to quantitative irregularities.

**Criticisms of theories of play.** Both Piaget and Vygotsky offer valuable information and perspective regarding cognitive development through play and social interaction, but they both attract criticisms. Lambert (2000) recognized the existence of three theoretical assumptions by Vygotsky; however, the assumptions are no longer relative in today's society. First, play is an opportunity for students' needs to become more mature. Second, the act of play is not a means of cognitive development; play actually aids in the mental development of every child (Schwarzmueller & Rinaldo, 2013). Third, children under the age of three lack the ability to use their imagination. Vygotsky's and Piaget's perspectives differ in terms of how individuals experience play cognitively. According to Smith (2009), Piaget theorized that play associated new experiences with previously embedded schematics, while Vygotsky argues that conditions and facts may hinder an individual's ability to perform abstractly. Piaget's cognitive theory of play offers an insight into the impact of play and its contributions to cognitive maturity.

**Benefits of play.** At an early age, a person's development is comprised of other vital elements in maturity. A child's imagination is a component that must be present during the early stages of development coinciding with play. Roopnarine, Suppal, Shin, and Donovan (1999) noted that there are distinctive intellectual, social, and emotional outcomes for the young people that incorporate imagination into play. Tekin and Tekin (2007) reported that participants experienced positive correlations with play and cognitive understanding. A participant in their

research study described play as the opportunity to discover new concepts with their friends. In addition, play is an exclusive opportunity to escape reality.

Social interaction affords an individual the opportunity to establish friendships and working relationships with his peers. Play and social interaction correspond with one another when children learn to play. The opportunity to socially interact with other children allows them to build stronger language skills at an early age. Hall, Rumney, Holler, and Kidd (2013) studied infants ages 18-31 months and found a weak relationship between all forms of play and spoken language. However, a multiple regression analysis, utilizing all variables, found a discrepancy in spoken language intelligence based on gesture use. Gesturing as an early form of communication builds social skills at a young age. Play provides the origin for communicative development, and it is this positive interaction through play that allows children to understand reality more clearly (Hall et al., 2013). There is a notable positive correlation between play and cognitive stimulation. On the other hand, however, there can be a detrimental impact if young people are denied the right to play.

**Harmful effects without play.** The lack of play can have catastrophic consequences on a child's wellbeing. A young person's development is hindered, his creativity decreased, physical activity levels lessened, stress increased, and the ability to cope with problems have been branded as prospective outcomes if a child lacks adequate play experiences (Clements, 2005). Play is also an important component in academia: it has the potential to decrease obesity rates and improve the overall wellbeing of the learner. It is indisputable: a child without play is likely not afforded the same opportunities as one who experiences play with physical activity on a regular basis.

## Self-Determination Theory

In an effort to increase the probability of overall improvement, SDT is a shared perspective of motivation among people who routinely practice specific behaviors to achieve a higher state of development (Deci & Ryan, 2000; Perlman & Webster, 2011). As a theory of human motivation, SDT plays a major role in the students' willingness to personally engage in the learning process. The premise of SDT is that the individual's internal and external development and needs determine motivation levels as well as the factors that promote desirable proceedings (Ryan & Deci, 2000b). Two factors explain this deficiency in motivation: students simply do not value exercise and are disinterested, or they lack competence and success with exercise (Korkiakangas, Alahuhta, & Laitinen, 2009; Ryan, Williams, Patrick, & Deci, 2009; Teixeira, Carraca, Markland, Silva, & Ryan, 2012). If students are disinterested, then students will not be motivated to engage in physical activity. Regrettably, there has been a sharp decline in the motivation levels of students in education (Kirk, 2010). Vallerand, Pelletier, and Koestner (2008) emphasized that the SDT provides education institutes with the ability to understand the human process and allows educators to design appropriate interventions to enhance the human condition. Improving motivation levels will potentially increase the productivity of the learners by gaining their attention to the content being presented.

Sweet, Fortier, Strachan, and Blanchard (2012) identified amotivation, extrinsic, and intrinsic as the three types of motivation of SDT. Alexandris, Tsorbatzoudis, and Grouios (2002) noted, over the course of the self-determination continuum that the levels of self-determination are variable: an individual advances from intrinsic to extrinsic motivation and then to amotivation. Amotivation is an undesirable result, if there is an absence of intrinsic and extrinsic motivation. Amotivation exists if motivation is nonexistent; the behavior is not a result of

intrinsic or extrinsic motivation (Alexandris et al., 2002; Deci & Ryan, 1985). When individuals experience pleasure simultaneously with physical sensations, then individuals are intrinsically motivated to experience the same feeling (Areepattamannil, Freeman, & Klinger, 2011). Intrinsic motivation has numerous benefits; however, the most promising is that it leads to favorable school performance (Areepattamannil et al., 2011; Gottfried, Marcoulides, Gottfried, Oliver, & Guerin, 2007). Extrinsic motivation is multidimensional, characterized by external regulation, introjected regulation, identified regulation, and integrated regulation (Areepattamannil et al., 2011; Ryan & Deci, 2002).

To better understand extrinsic motivation, one must first define each of these dimensions. Positive reinforcement uses rewards and praise to motivate students to pursue and obtain specific goals. As a result, these rewards are a form of external regulation. Gurlan, Trouillound, and Sarrazin (2013) noted that rewards create external pressure on the students to perform to earn a reward based on their performance. This external pressure regulates students' desires, motivation, and behaviors regarding performance in class. Introjection regulation is a regulating behavior to avoid shame or to attain egotism (Ryan & Deci, 2000a). A more progressively complex form of extrinsic motivation that shares characteristics with intrinsic motivation is integrated regulation (Gagné & Deci, 2005).

Competence, autonomy, and relatedness are three psychological needs upon which SDT is based (Edmunds, Ntoumanis, & Duda, 2006). The belief that individuals work toward a state of satisfaction based on the psychological needs for competence, autonomy, and relatedness based on commitment levels is a primary assumption of SDT (Deci & Ryan, 1985, 2000; Hagger & Koka, 2010). Kilpatrick, Hebert, and Jacobsen (2002) defined the psychological needs: competence is considered the sense of accomplishment and positive perception of one's ability,

autonomy is the belief that an individual is in control of his fate if his behaviors can be freely chosen, and relatedness is associated with the immersion in a social setting that is encompassed with gratification.

Young children depend on an instructor who provides feedback when determining competence (Hagger & Koka, 2010; Weiss, Ebbeck, & Horn, 1997). Competence is only possible if the learners are confident in their own skills to execute a particular task. The need to feel effective in a specific behavior defines competence, according to Viachopoulos, Kaperoni, and Moustaka (2011). Deci and Ryan (2000) theorized that, if the students have the skills to be successful, it is important that they are challenged and provided with applicable feedback which supports competence.

Since autonomy depends on the clarity of the teacher, communication is the key (Perlman & Webster, 2011). Additionally, autonomy is a reflection of one's own desire to learn, essentially giving the control of learning to the learner. Intrinsic and extrinsic forms of motivation are central to autonomy (Edmunds et al., 2006). SDT identified autonomously motivated students experience accomplishment and empowerment for their actions (Deci & Ryan, 2008).

Competence, autonomy, and relatedness were satisfied, based on the amount of positive feedback provided by the teacher; as a result, the elementary-aged students desire to participate is more self-determined (Hagger & Koka, 2010). Most importantly, those who take an interest in activities to expand their autonomy, competence, and relatedness are successfully dependent on what the environment has to offer (Kilpatrick et al., 2002). SDT has a strong correlation with the environment of the learner. Sweet et al. (2012) concluded that fulfilling the three psychological

needs by using autonomy increases confidence, self-determined motivation, and perception of outcomes of physical activity positively.

Deci and Ryan's (2008) theory differentiated the types of motivation that consist of as autonomous and controlled. Autonomous motivation encompasses the intrinsic and extrinsic motivation that individuals perceive and relate on a personal level with an activity's value. Autonomous and controlled motivation essentially can be interpreted as intrinsic and extrinsic motivation. Teixeira et al. (2012) define intrinsic motivation as completing a task for inherent satisfactions and extrinsic motivation as the perseverance of accomplishing a task for an external outcome. Essentially, the external motivation is reliant on an award and results in controlled motivation.

Controlled motivation is different compared to autonomous motivation because a person's behavior is reinforced by a stimulus. Awards regulate motivation, but regulation is internalized and energized by self-factors (Deci & Ryan, 2008). Autonomous motivation has only a limited impact on sustaining regular engagement in physical activity (Mullan & Markland, 1997; Teixeira et al., 2012). Controlled motivation is utilized as a means to remain positive by using reinforcement to avoid factors that impact motivation negatively such as poor attitudes, self-esteem factors, and ego-involvements (Deci & Ryan, 2008).

Autonomous and controlled motivation can be used for the purpose of improving motivation levels; however, autonomous has been proven to yield more positive outcomes (Deci & Ryan, 2008). Autonomy is driven by choice; therefore, SDT suggests that motivation can vary in terms of autonomy (Deci & Ryan, 2000). Higher levels of autonomous motivation correlated with higher amounts of physical activity conducted by Verloigne et al. (2011).

Rewards are an option to influence students and can be utilized as a means to further motivate academic attentiveness. On the other hand, rewards can have both a positive and negative impact on the motivation levels of the learners. Gagné and Deci (2005) concluded that extrinsic rewards can impact intrinsic motivation, by negatively affecting a recipient's mental regulation, achievement level in activities, and social responsibility. On the other hand, tangible rewards are a more suitable strategy to increase intrinsic motivation. Kilpatrick et al. (2002) concluded that the benefits of rewards are only temporary for increasing motivation levels and should not be used to encourage physical activity. Instead of continuous use of rewards that limit student empowerment, this study was conducted to determine if positive reinforcement has an influential motivating factor that increases student engagement in PE.

SDT is centered-around the idea that higher motivation in students will lead to more appropriate behaviors. Chatzisarantis and Hagger (2009) concluded that SDT has potential for assisting PE teachers to promote leisure physical activity. Kilpatrick et al. (2002) identified positive feedback, goal-setting, providing clear rationales for content, and the use of rewards as positive reinforcement strategies for teachers to use. Likewise, the class will also encourage an environment filled with social interaction and empowerment through choices. To discover if these strategies improve students' aspirations in PE and physical activity participation, student interviews and teacher journals will be used to determine effectiveness to evaluate how these teachers use the strategies.

### **Review of the Literature**

The purpose of this research study was to investigate the influential factors that motivate and demotivate third-grade elementary students to engage in PE and physical activity outside of class. I explored the experiences of 18 students from three different elementary schools, one

parent from each of the 18 students, and the three elementary PE teachers. A comprehensive review yielded little research in identifying the exact factors that directly impact student motivation to participate in PE and extracurricular physical activity. To better understand the topic, a review of the current research relating to child obesity, PE, and positive reinforcement was conducted.

### **Childhood Obesity**

An increasing number of elementary-aged students are being identified as overweight or obese based on the BMI charts. Yoshinaga et al. (2004) noted that obesity has been on the rise in elementary-aged students over the past decades; currently, the epidemic is continuing to dramatically spread (Koukourikos, Lavdaniti, & Avramika, 2013). As the problem continues to expand across the United States, a portion of the youth population is simply getting larger. Overweight and obesity have increased over the last 30 years in the United States, and research suggests that the rates will continue to rise (Moreno, Johnson-Shelton, & Boles, 2013). At this point, nearly 30% of young people are overweight (Murnan, Price, Telljohann, Dake, & Boardley, 2006; Ogden, Flegal, Carroll, & Johnson, 2002). Although the Centers for Disease Control (2013) has reported a decline in obesity rates in low-income preschoolers, the most recent rates from the American Heart Association (2013) reaffirm staggering statistics of 33.0% of boys and 30.4% of girls are overweight; furthermore, 18.6 % of the boys and 15.0% of the girls are obese. Research indicates excessive food consumption and sedentary lifestyles are linked to environmental changes (French, Story, & Jeffery, 2001; Grow et al., 2010; Weinsier, Hunter, Heini, Goran, & Sell, 1998). These environmental changes are attributed to the income and economic status of families. A significant correlation was found between lower neighborhood disadvantaged and increased risk of child obesity (Grow et al., 2010).

There are numerous factors that contribute to excessive body weight, resulting in elevated obesity rates. Factors that contribute to obesity are access to safe places for children to get exercise and quality afterschool programs (DeRenne, Maeda, Chai, Ho, Kaluhiokalani, & Braun., 2008). Additionally, high calorie food, eating in excess away from home, and consuming more prepared foods are the primary contributing factors, in terms of consumption (Anderson & Butcher, 2006; Roblin, 2007). Elementary-aged students have a high-rate of sedentary behavior because of the ease of life; 5- to 8-year-olds spent 4.1 and 5.3 hours a day using a sedentary behavior (Janz, Burns, & Levy, 2005; Pate, Mitchell, Byun, & Dowda, 2011).

Neighborhood safety has been found to be the most pressing environmental factor that predicts physical activity (Centers for Disease Control, 1996; Myers & Roth, 1997; Molnar, Gortmaker, Bull, & Buka, 2004; Sallis, Johnson, & Calfas et al., 1997). Other notable factors are associated with the caregivers and time available for PE. Parental fatness is a direct risk factor; the parents are responsible for the environment that the child has been raised (Cole, 2006). This environment is associated with food choices, physical activity levels of the caregivers, and the socioeconomic status of the caregivers. In addition, the amount of time in PE has also contributed to the rise in obesity; time reduction does not allow obese students time to be physically active (Wallhead, 2007). As these rates increase, the healthcare costs become astronomical. Childhood obesity is growing faster than adult obesity, and in 2009 it cost \$147 billion to treat illnesses related to the problem (Dentzer, 2010). Costs are only one negative factor associated with the obesity epidemic plaguing our youth. There are also a number of health-related factors that can be life-threatening, if not addressed.

Childhood obesity leads to serious health-related complications and diseases. Obesity can lead to type 2 diabetes, hypertension, early puberty, menstrual irregularities and atohepatitis,

sleep apnea, asthma, benign intracranial hypertension, musculoskeletal disorders, and psychological problems (Lakshman, Elks, & Ong, 2012; Reilly et al., 2003). Additionally, students that are overweight deal with problems that are associated with their self-image and self-esteem. Hills, Okely, and Baur (2010) noted that the harmful effects of obesity on a young person's psychosocial health could be devastating for the child. As a result, the obese students' motivation to participate in PE may be negatively affected. It was concluded that 34% of adolescents were discriminated against in PE and physical activity opportunities because of their weight (Puhl, Luedicke, & Heuer, 2011; Peterson, Puhl, & Luedicke, 2012). Obesity impacts their quality of life because it limits activity and participation (Tsiros, Coates, Howe, Grimshaw, & Buckley, 2010). Furthermore, Tsiros et al. (2010) concluded a combination of negative repercussions of obesity, which include poor cardiovascular fitness, diminished motor skill ability, and in limited studies, diminished strength, stability, and some muscular discomfort.

Childhood obesity is an epidemic that many health professionals believe can be improved by increasing physical activity levels of youth (Bambara et al., 2012). Physically active games are a fundamental component of PE, making the subject a plausible solution to childhood obesity. Treatment of obesity can be a difficult task, but having the appropriate measures in place makes the treatment feasible. Wallhead (2007) recommended that physical educators adopt lessons that include moderate-to-vigorous physical activity and motivate the overweight students to be physically active outside of class. Comprehensive school programs have been shown to reduce childhood obesity through parent and teacher collaboration (Qian, Newman, Shell, & Cheng, 2012). Programs that teach young people about healthy living and increasing physical activity motivate young people. Gutin (2008) suggested that calorie intake is important to monitor; however, the most critical element to reduce obesity is increasing physical activity

levels. The most effective treatments are dietary restrictions, behavior modifications, physical activity, and parental involvement (Caprio, 2006). In class, Wallhead (2007) suggested that team grouping allows obese students the opportunity to socialize and improve their motivation because they feel similar to their peers.

### **Physical Education**

PE can be a major influential element for young people to be motivated to participate in regular physical activity. In order to offer an environment that motivates students to take part in regular physical activity, the program needs to be a sufficient and high-quality program. Avery and Brandt (2010) defined a quality PE program with six characteristics: daily PE (at least 150 minutes per week for elementary, and 225 minutes per week for middle/high school), curriculum that meets the National Standards for PE, student assessment aligned with instruction, certified PE teacher providing meaningful content through standards-based instruction, pupil-teacher ratio equivalent to that in the classroom context, and adequate equipment to promote maximum practice time.

Some states do not offer quality PE programs and have unwisely removed it from the curriculum. The School Health and Programs Study (2006) reported that 69.3% mandate PE, 20.8% of those allow students to be exempted from PE, and only 3.8% provided daily PE. The lack of opportunities to be physically active is a result of reducing PE. Consequently, as PE programs are eliminated, the children fail to get the recommended 60 minutes of physical activity from PE (Bershwiner & Brusseau, 2012; Parks, Solomon, & Lee, 2007). Overcrowded PE classes and lack of time also reduce the amount of physical activity for children; the only solution would be to lengthen the school day to offer additional time for physical activity (McConnel & Wendel, 2010). The time constraints create an environment that restricts physical

activity in class, a determinate in weight control (McConnell & Wendel, 2010). Physical activity is an important component of healthy living because it involves an interaction of biological, environmental, social, and psychological influences (Biddle & Mutrie, 2001; Edmunds et al., 2006). Motivating students to employ a positive approach to PE and physical activity can be an arduous challenge.

Relating to motivation, a comprehensive program is indeed vital for the benefit of the student; additionally, the success of the program depends on a clearly defined vision. The vision or mission of PE depends on the state and federal statutes that mandate specific coursework. On the other hand, the role of PE is consistent across the curriculum. This means physical educators must take the appropriate steps to align their teaching with the high-achieving benchmarks in the education system. The increase of standards, the economic downturn, and the reduction of class offerings have created an environment in PE that will require PE teachers to rethink how they measure their students' achievement (Collier, 2011). The value of assessment is priceless because effective assessments bring integrity to the subject. Collier (2011) concluded that assessments provide PE programs with student progression data, program evaluations, and data that supports the necessity and effectiveness of providing PE in school.

The future of PE is unclear, mainly due to various state restrictions and curricula standards. In 2000, Penney and Chandler advocated for change in PE and regarded change as a necessity to make certain state policies and curriculum changes correspond with the vision of the subject. A clear vision or mission statement provides a clear direction and framework for all stakeholders. Stakeholders' engrossment entails new partnerships with teachers, students, caregivers, and other agencies outside of school to assure future development in the field (Penney & Chandler, 2000). In an attempt to unite American citizens, Michelle Obama

implemented a program to encourage regular physical activity. “Let’s Move” and “Let’s Move in Schools” are excellent examples of programs that are designed to promote physical activity to improve overall health and, most importantly, great examples of programs with a clear vision to improve the wellbeing of all citizens (Psimopoulos, 2013).

Teachers, students, and caregivers’ experiences and perceptions have all been closely examined in previous research studies in PE. Medcalf, Marshall, Hardman, and Visser (2011) studied the perceptions and experiences of students who have social, emotional and behavioral difficulties that were taught using the national PE curriculum in England. Medcalf et al. (2011) used 31 interviews from six case studies over the course of a 24-week period and found that these students believed PE to be a valuable part of their school experience because the lessons and activities did not limit their participation due to their individual differences. This positive experience with the subject indicates that benefits of PE include an outlet for at-risk students to experience success in school.

Parent studies have also been conducted and have yielded findings that can be distressing for advocating a progressive PE program. Sheehy (2006) discovered some interesting results relating to caregivers’ perceptions of their child’s fifth grade PE program. Of the 27 participants, 22 (81%) could recognize the PE instructor and 19 (70%) knew the teacher by name. In turn, eight (30%) did not know the PE teacher’s name. A PE teacher’s ability to be recognized is a positive characteristic of a successful PE program. On a more distressing note, only eighteen (67%) participants knew the exact days of their child’s PE, and two (7%) participants knew nothing about the program. The existence of caregivers who do not know much about PE indicates that teachers must use strategies to inform caregivers of what content is being covered in class. Regrettably, the teacher may not be at fault. The caregiver participants also

acknowledged that PE was left off the Parent-Teacher Organization's (PTO) list, and the grading system's relying on S, N, U indicates that it is not valued like academic subjects (Sheehy, 2006). An additional study conducted by Downing and Rebollo (1999) sought to find out the perceptions about PE of parents (100) of children with a disability. The study employed surveys to rank 21 variables that are most important in their child's PE experience. Based on parents' perceptions, class size, stakeholder interest and support, and motivation were found to be significant influential factors in the PE experience of students with individual needs. All of these variables are significantly linked to a student's desire to engage in PE. Furthermore, the variables are harmonious to positive school engagement among stakeholders.

Motivating students in PE can be a difficult task, especially students that have had poor experiences with physical activity which have resulted in a negative perception. Martin and Sharpe (2009) expressed that PE teachers are confronted with the complicated task of motivating students to participate in class. If the teacher struggles to motivate students, then it is these students who will not be motivated to participate in PE or to take part in physical activity outside of class. Cowell (1949) identified the ability to motivate individual students directly to yield more desirable outcomes. This fact is still true. Aelterman, Vansteenkiste, Keer, Berghe, Meyer, and Haerens (2012) reaffirmed the importance of motivating students by promoting a physically active lifestyle and staying engaged in the content being taught to increase student aspiration to be healthy, active individuals. The teacher's perceptions and strategies to motivate were discovered in the teacher journal entries.

PE is essentially designed to serve multiple purposes: cognitive develop, physical development, skill development, and achievement of the standards in place by the National Association of Sport and Physical Education (NASPE; Gross & Buchanan, 2011). The

underlying theme of PE is maintaining a physically fit lifestyle through regular physical activity outside of school for a lifetime. Promoting physical activity is the ultimate goal of PE, and finding ways to achieve that is essential (Bryan & Solmon, 2012). However, the student's desire to be physically active away from school may be determined by the surrounding environment or resources available to the student.

It has been determined that energy balance and obesity can be impacted due to social and physical environments (Datar, Nicosia, & Shier, 2013). The study in 2013 was designed to investigate if the home environment reduces the amount of physical activity in which a child engages. Datar et al. (2013) found that parent perceptions do not have a direct impact on childhood obesity; however, increasing television watching and reducing regular physical activity could be habit-forming as individuals' age. Over the course of 9 years, the data of 19,000 participants suggest that childhood obesity has no correlation with parental perception of neighborhood safety. A parent's perception may have little effect on the obesity levels of children; however, research supports the notion that the perception of the community may influence the physical activity levels of the residents.

A study by Durand, Dunton, Spruijt-Metz, and Pentz (2012) investigated if the community type impacts the perceptions of parents and physical activity in children within those communities. There were 280 parents' perceptions in the conventional community and 85 parents' perceptions in the smart growth community that were analyzed using the Neighborhood Environment Walkability Scale (NEWS). Focusing on the ability to commute to school by walking or riding a bike, the study investigated variables that relate to safety and the physical environment. Durand et al. (2012) concluded a variety of elements within the environment surrounding the home influenced levels of physical activity and travel that requires physical

exertion, such as crime, access to sidewalks and crosswalks, the beauty of the community, which was true for residents in communities designed to encourage physical activity.

A community that provides the necessary resources to offer its residents the opportunity to embrace active lifestyles, in fact, clearly increase the daily activity levels of community members. An increase in overall physical activity levels can be expected if neighborhoods examine and provide residents safe access to sidewalks, cul-de-sacs, and proximity to recreational facilities (Tappe, Glanz, Sallis, Zhou, & Saelens, 2013). Additionally, Glenn et al. (2012) found parents levied time constraints and other restrictions, including homework, chores, eating dinner, and prior commitments the children had to attend. This is an indication that safety and parental commitments affect physical activity levels of their children.

Physical activity is the main component of a higher quality PE program where encouraging children to maintain physically active lifestyles is standard. Physical educators have to stress regular physical activity to the students and motivate them through innovative strategies. These innovative strategies need to appeal to all learners by engaging them in thought-provoking activities in class that will further motivate the student to participate in physical activity at home.

### **Positive Reinforcement**

A PBIS system's purpose is to reinforce desirable behaviors using interventions and strategies that are perceived to be positive in nature to avoid any negative experiences for the student. Compared to punishment, the use of positive reinforcement is a more effective way to direct students to use more suitable behaviors and motivate them to learn. Downing, Keating, and Bennett (2005) found that punishing limits students' growth: the students also fail to learn proactive or positive behaviors. It is these proactive behaviors that create students who are

ethical, morally sound, and more academically successful. These students are focused and motivated to achieve higher expectations of teachers, but most importantly, their own goals.

Positive reinforcement is a strategy frequently used in classroom management and is a component of the popular PBIS initiative. Positive reinforcement can be used to make certain the learning environment is safe, productive, and conducive to learning. Ratliffe, Ratliffe, and Bie (1991) recognized the gymnasium as the learning environment, and installing an effective environment will allow students to focus on skill development. Methods of positive reinforcement used by physical educators include using positive comments, consistent feedback, offering awards for public display, and periods of free time for achieving expectations.

Previous research indicates that reinforcing behaviors will positively alter students' perceptions of PE and of the teacher (Downing et al., 2005). Students that view their PE program in a favorable light, in theory, are likely to value physical activity. In addition, the student whose behavior is reinforced positively is intrinsically motivated to maintain a positive approach to physical activity. Intrinsic motivation is best portrayed when individuals take part in activities for excitement as a means of obtaining a feeling of gratification (Brunet & Sabiston, 2010). Downing et al. (2005) articulated the necessity of providing feedback to students that will motivate them to use proper behaviors. This research does not define what types of students are motivated by positive reinforcement in PE. As a result, a study exploring the use of positive reinforcement for elementary-aged students in PE is imperative to investigate the influencing factors for students regarding PE and physical activity. Prior to conducting the research, a number of barriers must be overcome to motivate all students with positive reinforcement.

Mowling, Brock, Eiler, and Rudisill (2004) identified six barriers of motivation in elementary PE students: intrinsic motivation, extrinsic motivation, the teacher, the curriculum,

and the setting. For the purpose of the study, the data collection sources were used to analyze these five barriers to gain a better understanding of students' motivation to accept a physically active lifestyle. The study aimed to investigate what motivates or demotivates students; as a result, its design will analyze all of the barriers, with the exception of the administration barrier. Mowling et al. found that much of the distain for PE resulted from the use of exercise in the class. If students dislike PE because of exercise, a quality teacher must use physically active games to alter their perceptions. Rewards can also be used to extrinsically motivate students. These rewards should only be used to celebrate an accomplishment, not a routine behavior. The teacher may be the primary determinant of the accomplishments and motivation levels of the students. It is critical for the teacher to address the needs of individual students. Minimal engagement in activity due to monotonous routines leads to a decrease in motivation. If a teacher fails to gain the attention of the student through engagement, then it is impossible to successfully motivate students who are obese. This attention factor also has a correlation with the type of curriculum being used. A curriculum that concentrates on performance, as opposed to skill building, may negatively impact motivation levels. Administrators play an important role in the morale of a school also can assist in ensuring a PE program is offering a quality experience to the learners. Making the administration aware of current trends or standards in PE has improved their involvement in the subject. Finally, the school setting is a possible barrier for motivating students. In PE, the access to a variety of equipment, the cleanliness of the environment, the lighting in the gym, and the room temperature impact the setting. If a proper setting is not provided, then the students will not be motivated to be actively involved in PE. Barriers of motivation can potentially be overcome with positive reinforcement as a possible solution to rise

above these obstacles. Yet, positive reinforcement must be used appropriately or students can be punished by the strategy.

Positive reinforcement has yielded a positive correlation between student behavior and achievement. On the other hand, a fine line exists between effectiveness and inappropriateness. By investigating the motivating factors associated with positive reinforcement in PE, it will be possible to identify what motivates third-grade students to be physically active. Maag (2001) noted that external rewards could negatively affect students' motivation levels. By rewarding a student for achieving a certain goal, the purpose would be to reiterate the importance of physical activity; however, the student may perceive he achieved the highest goal possible and not use it again.

Rewarding the student does not necessarily have to be a materialistic award to motivate the students. Praise is an excellent motivational tool when using positive reinforcement to support desirable behaviors. Tobin and Vincent (2011) desired to identify the strategies for preventing disproportionate exclusions of African-American students. To reduce the inconsistent suspension rates of African-Americans, the researchers wanted to find what tactics could reduce the probability of African-American students' using inappropriate behavior that leads to office referrals. The most promising strategy was found while using a Schoolwide Positive Behavior Support (SWPBS). According to Tobin and Vincent (2011), the schools that had teachers using a 4:1 ratio of positive remarks compared to negative remarks had a reduction in exclusions of African-American students. Clearly, the use of praise positively reinforced more desirable behaviors. Additionally, SWPBS rely on efficient transitions, behavior reports, and plans free of racial undertones written by staff teams, and local resources to assess the system and make certain positive interventions are being used (Tobin & Vincent, 2011).

Creating an environment that is advantageous for the learner improves the students' experiences and results in higher achievement levels. A positive environment can be created by eliminating the situations in which the students have low motivation, self-esteem, and poor attitudes. Based on a study by Barr-Anderson et al. (2008), PE educators must overcome obstacles that negatively affect the classroom setting to make certain the environment is fun and nurturing. Enhancing the environment is a strategy beneficial to boosting engagement levels of the students. Griffin et al. (2013) enrolled 43 elementary-aged students to take part in a study to determine the effectiveness of a program designed to improve their experience with physical activity. The Summers Are for Exercise (SAFE) was used to create a Master Motivational Climate (MMC) to increase students' commitment to physical activity (Griffin et al., 2013). The physical activity levels of the students were assessed using accelerometers to compare PE and the SAFE program. The results concluded that students were more active in the SAFE program, and it is believed that the positive engagement allowed the participants to enjoy physical activity. Overall, the success was attributed to manipulating the environment to be positive and cultivating.

### **Summary**

Identifying the influential factors that motivate and demotivate students regarding PE and extracurricular physical activity will assist physical educators to create an environment that improves the learning experience for the student. The purpose of this study was to investigate the influential motivating factors to engage in PE and extracurricular physical activity from the perspectives of third-grade students, physical educators who utilize positive reinforcement in their classes, and caregivers of the subject students in three title-1 elementary schools in North

Carolina. Identifying these motivations for a behavior allows a teacher to make modifications to improve skills and reduce undesirable behaviors (Joosten, Bundy, & Einfeld, 2009).

## **CHAPTER THREE: METHODOLOGY**

### **Overview**

The purpose of this qualitative collective case study was to discover the role of positive reinforcement in third-grade students' motivation to engage in physical education (PE) and leisurely physical activity at Field Elementary, Gorge Elementary, and Lauder Elementary. To collect data, 18 students (nine males, nine females) from the three different elementary schools, 18 parent/guardians of the student participants, and three physical educators (one male, two females) took part in the data collection process, involving student interviews, teacher journal prompts, and parent surveys. The primary focus of the study was to determine what factors, if any, play a role in the students' motivation to engage in a positively reinforced PE environment and extracurricular physical activity. The purpose of this chapter is to clearly identify the design of the study, which includes the setting, participants, research questions, data collection methods, and analysis procedures.

### **Design**

A qualitative collective case study design was used to investigate the influential motivating factors of elementary-aged students in PE class and leisurely physical activity. A collective case study is a group of cases that use multiple sources of data to gain different perspectives (Stake, 1995; Tellis, 1997). Creswell (2007) conceptualized to better illustrate the problem or issue, a multiple case study is utilized to illustrate the issue in multiple cases. Following this design will require data be collected at three different sites within the same district. Additionally, an inductive approach is warranted because the factors that motivate or demotivate engagement in physical activity can only be identified as the data is collected to condense data, establish links between objectives and findings, and to develop a model based on

experiences (Thomas, 2003). Field Elementary, Gorge Elementary, and Lauder Elementary were the sites where the research was conducted. Research at multiple sites requires a case study design with multiple collection instruments to investigate the phenomenon. Baxter and Jack (2008) summarized that the primary function of a case study design is to investigate a specific occurrence found using multiple sources. The phenomenon in this study was the influential motivating factors that students experience in a positively reinforced environment. Furthermore, Yin (2009) suggested that a case study be used to answer “how” and “why” questions. The influential factors are believed to be the phenomena that play a role in a child’s assertiveness in PE and physical activity. The student participants have expressed their discontent with PE and physical activity based on the Likert-scale answers. Creswell (2007) noted that a case study requires a qualitative investigation in bounded systems using multiple data collection sources, development of a case description, and popular themes. Since the design of the study was configured across the school district at three different schools, it was labeled as a multi-site study (Creswell, 2007).

### **Research Questions**

To better understand the influential motivating factors that determine a student’s desire to engage in a PE class and boost leisurely activity, it was necessary to have a set of primary questions. The following question was used to guide my inquiry:

**RQ1:** What factors positively influence elementary school students to be physically active and engage in PE classes?

The following sub-questions were used to further facilitate the research process:

**RQ2:** What factors do students identify as significantly influencing their motivation to be physically active?

**RQ3:** What is the role of caregivers in their children's motivation to be physically active?

**RQ4:** How can educators influence students' motivation to be physically active through positive reinforcement?

### **Settings and Schools**

The research was conducted at Field Elementary School (pseudonym), Gorge Elementary School (pseudonym), and Lauder Elementary School (pseudonym), located in a small city in North Carolina. The town was a suburb of a large metropolis; a majority of the students were from lower, socioeconomic families. The median household income is \$33,704, well below the state average of \$46,291 (U.S. Census Bureau, 2010). The schools were nestled in small neighborhoods; a majority of the students live in apartments and low-income housing surrounding the schools. Based on 2010 Census results, the population of the city is over 10,000 people (U.S. Census Bureau, 2010). All three schools were identified as Title-1 and had a majority of students who are eligible for free and reduced lunch.

Students at all schools were previously exposed to some form of positively reinforced environment on a school-wide level or in PE. The district did not mandate a school implement a PBIS system; however, Field Elementary was the only elementary school in the district that does not have a PBIS in place. On the other hand, the PE teacher at Field Elementary had his own form of PBIS in place. In terms of physical activity, the school district had no initiatives for students to be physically active. One characteristic the participating schools share was the use of a character education program to teach young people morals and values. This was an important feature because students have been taught to answer truthfully, but they may have been apprehensive to answer truthfully because of their fear of hurting someone's feelings.

### **Field Elementary School**

Field Elementary School was located adjacent to the high school and middle school in a central location of the city. There were 302 students enrolled, 77% (232) were eligible for free lunch and 6% were eligible for reduced lunch (Public Schools K-12, 2013). The PE teacher, Mr. D (pseudonym), had taught PE for 8 years and 3 years at Field. Each class received PE once a week and recess daily. Mr. D taught at Field Monday through Friday, every classroom teacher received PE at least once a week. The PE classes shared a room with the cafeteria, and a divider separates the two. Tile flooring, high ceilings, and iridescent lighting yield a loud environment that results in poor communication between the students and teacher.

Mr. D used positive reinforcement by rewarding classes based on the overall class behavior. If the class followed Mr. D's rules and completed class assignments without disruptions, then the class was awarded a set number of points. Once the class earned 50 points, the class was offered a free day. The free day allowed the students to choose what activity was played during that lesson. As a school, Field Elementary had a limited PBIS program in place.

### **Gorge Elementary School**

Gorge Elementary School was located in the eastern part of the city adjacent to the district's school of technology. Of the 284 students enrolled, 61% (173) of the students were eligible for free lunch and 11% (30) were eligible for reduced lunch (Public Schools K-12, 2013). Mrs. S had taught 10 years within the district; she had spent 9 years at Gorge. One day a week, Mrs. S traveled to another elementary school to teach. Each class received PE once a week and recess daily. Mrs. S taught her classes in a gym separate from the school. It was a traditional gym with wooden floors, bleachers on both sides, and a stage on one end. On Fridays, Mrs. S taught PE in a classroom at the second school.

Gorge Elementary had PBIS: the students earned tokens in special area classes, on the playground, in the hallways, and for different accomplishments. Mrs. S relied on the PBIS to positively reinforce behaviors in her classroom. She offered additional incentives; additionally, she awarded points to the classroom teacher. The points accumulated until the students earned prizes from the classroom teacher. Students were reminded of the possibility of earning tokens by a colorful display located in the front of the gym.

### **Lauder Elementary School**

Lauder Elementary School was located in a neighborhood in the southern part of the city. There were 241 students enrolled, 63% (151) were eligible for free lunch and 8% (20) were eligible for reduced lunch (Public Schools K-12, 2013). Each class received PE once a week and a daily recess. Mrs. M was a young teacher; she began her career at Lauder and had been the PE teacher for 4 years. She would leave Lauder for a half-a-day, once a week, to teach PE at Field Elementary. PE was taught in a multipurpose room with tile flooring, iridescent lighting, and limited-space.

Lauder Elementary was labeled as a PBIS school because of their exemplary methods of using positive reinforcement to support desirable behaviors. The school awarded tokens for class accomplishments, individual accomplishments, and outstanding achievements. Similar to Gorge Elementary, Lauder provided the students with prizes when each class earned a set number of tokens. Ms. M went further to use positive reinforcement within her class by offering recognition to reinforce desirable behaviors. When students achieved pre-determined lesson goals, the students got to move closer to the front of the gym. Once the students reached the front of the gym, the students got to lead warm-ups for the day. At the end of the day, the students returned to the back of the line. In doing so, a stranger could not walk into the room and identify the good

or bad students. Additionally, the students could earn PE awards based on behavior and individual achievement.

### **Participants**

Field Elementary (pseudonym), Gorge Elementary (pseudonym), and Lauder Elementary (pseudonym) were all located within the same district and city. The study relied on a Likert scale to identify the potential student participants. Based on Likert-scale scores, it was assumed these students were unmotivated to engage in PE or chose not to participate in leisurely physical activity regularly. The male and female students that scored the lowest on the scale from the third grade at each site were requested to take part in the study. To get equitable gender representation among the students, I made certain that each of the three schools had three males and three females from the same class. Following this strategy, I ensured each participant was reinforced using the same strategies at each site. Seeking students' perceptions of PE and aspirations to be physically active required a sampling of students who had little desire to participate in PE or physical activity. Creswell (2007) identified this sampling technique as criterion sampling because the individuals have experienced the phenomena. Under the circumstances, the students were identified based on a Likert scale.

To gain a caregiver perspective, one caregiver of each student participant completed a questionnaire to incorporate an outside perspective of PE and leisurely physical activity into the study. The PE teachers' perspectives were a vital source of data because of their educational background, knowledge about the community, and experience with motivating the students. There was only one full-time PE teacher at each school site; as a result, the PE teacher at each site participated in journal prompts to identify common themes relating to factors that may motivate or demotivate students. The caregivers and PE teachers helped to identify influential

motivating factors that encourage or discourage active participation in PE class and extracurricular physical activity of elementary-aged students.

The final sample population included an equal representation of male and female students at each school site. At each school, six students, three male and three female, participated in interviews. One caregiver of each student participant completed a questionnaire and the PE teacher at each school site completed journal prompts. In summary, the study was comprised 18 student participants, 18 caregiver participants, and 3 teachers.

### **Procedures**

After obtaining Institutional Review Board (IRB) approval, I secured the forms necessary to protect the privacy and rights of the participants. I obtained minor assent and caregiver permission forms for the participants under the age of 18, a consent form from each parent/guardian participant, and consent forms from the teachers. At the beginning of the semester and prior to launching the study, I sent home a handout in the students' weekly planners, dispersed every Friday afternoon. The handout included the purpose of the study, the participants' role, and the use of the students' information to improve the PE experience for all learners. The take-home materials also included the required forms to participate (see Appendix B), which was signed by the third-grade participants and their caregiver to take part in the study. Only the eligible participants received a packet in their planner; however, I sent home a packet to additional candidates in case I needed more participants. Simultaneously, I dispersed the required consent forms to the teacher participants.

With regard to additional methods, I conducted the face-to-face student interviews, administer the teacher journal prompts via email, and send home parent questionnaires in concealed envelopes with the students' weekly planners. By using the data sources appropriately,

I increased the probability of achieving triangulation. Once the data was obtained, member checking and a peer review validated the data collected. To prevent the data's being viewed by a third party, I destroyed the data once it was transcribed in secured locations.

### **The Researcher's Role**

I have taught PE for 8 years and have established a good reputation with my students and caregivers. The students are familiar with my routines and procedures by being consistent, fair, and maintaining a positive attitude. Most importantly, the five rules I use have stayed the same since I started teaching. As a result, the students' behaviors are reinforced using rules and positive reinforcement through PBIS. A majority of the schools within the district have implemented components of PBIS and use positive reinforcement to motivate students. Teachers use special incentives to reward classes and individual students who achieve goals and follow the posted rules. Essentially, every student's accomplishments are celebrated and praised to reinforce the most desirable behaviors.

Each teacher participant was an elementary PE teacher within the county where I currently teach. I personally knew each of the teacher participants and had established a professional relationship with them during my tenure in the district. They were dependable individuals who offered the best learning environment for their students by using professionalism and multiple strategies based on student needs. To motivate the students, the teachers used positive reinforcement to persuade the learner to engage in PE and to value the content of the subject. The journal entries were only intended to gain a teacher's perspective of student motivation, the strengths and weaknesses of positive reinforcement strategies, and how we could motivate young people to embrace physical activity. I met with the student participants prior to interviewing to explain the purpose of the study and too define terms like positive reinforcement,

motivation, and physical activity. As an interviewer, I created questions that were on the grade level of the participant. If they had questions during the interview, I was able to explain each question to make certain the participant can answer. The caregiver surveys were sent home with weekly materials: the caregivers were asked general questions that allowed them to answer each question using a few sentences. To introduce the caregivers to the study, I sent a bio of myself with a detailed description of the study with the consent and assent forms.

### **Data Collection**

The data collection process required the use of multiple sources from a variety of perspectives. Yin (2009) noted that no single source is better than any other. This section discusses how the student interviews, teacher journal prompts, and the parent questionnaires were administered. Creswell (2007) recommended piloting testing to make certain the interview questions, journal prompts, and parent surveys can be easily interpreted. In order to accomplish this task, I made use of the students, teachers, and caregivers at the school where I currently teach. In addition to the administration criteria, the sections also include the questions that were asked during the interviews, questionnaires, and journal prompts.

### **Student Interviews**

The interviews were conducted in a face-to-face setting, away from the gymnasium and multipurpose room. Conducting the interviews in an environment away from the class will allow the students to be comfortable and away from distractions (Gill, Stewart, Treasure, & Chadwick, 2008). To make the students more comfortable with my presence, I participated in a PE class at each site. Once I developed a relationship with the students through prolonged engagement, I interviewed each participant before implementing any other data collection source. To increase validity of responses, Gill et al. (2008) recommended using a pilot interview to make certain the

questions are appropriate and can be comprehended by the participant. The interviews were video-recorded, transcribed, and reviewed by a peer to guarantee the validity of my interpretations. For confidentiality purposes, the reviewer was given access to the audio portion of the interviews with a copy of the transcribed documents. This prevented the reviewer from potentially being able to identify the research participant. To ensure the students were focused during the process, I asked the first five questions in the first session and last five questions in a different session on a different day. Furthermore, I conducted the interview to make certain the interviewees understood the questions being asked. Qu and Dumay (2011) suggested following a well-planned interview design (see Table 1) to increase the validity of responses and lead to more raw data. This was possible because I made certain that the questions were written according to the reading level or comprehension level of the participants.

The purpose of the questions was to gather an understanding of the participants' dispositions relating to PE and physical activity. Questions 1 and 2 were asked to determine the participants' experiences with PE and what they liked the most and least about the subject. Marron, Murphy, and O'Keeffe (2013) identified the negative stigma of bad experiences in PE and how it leads to isolation. These questions allowed me to begin to develop possible themes based on experiences.

Questions 3 through 4 investigated the students' perceptions of a positively reinforced learning environment. The use of positive reinforcement was defined by incentives, praise, and the use of feedback from the teacher. These components are necessary in a positive PE setting (Sanderson, Heckaman, Ernest, Johnson, & Raab, 2013).

Questions 5 and 6 were asked to determine the students' motivational levels when participating in a lesson and the impact of another student on their experience. Bullying was

investigated to determine the impact of a peer on one's motivation to engage. For clarity purposes, I defined bullying as having one's feelings hurt (Gibbone & Manson, 2010).

Questions 7 through 10 were asked to analyze the students' perceptions of physical activity. Silverman and Subramaniam (1999) expressed that a student's desire to engage in a physically active environment is based on experiences and skill level. Identifying reoccurring themes based on experiences and attitudes led to valuable data for interpretation.

Table 1

*Standardized Open-Ended Interview Questions*

Question #	Interview Question
1	Please describe your feelings about PE. Likes and dislikes.
2	Please describe some of your experiences in PE. Do you have any good or bad experiences?
3	Can you recall an occasion when you received a reward for achieving a goal? Please describe how you felt after you received the reward from accomplishing the task.
4	Does earning a reward or prize make you want to be come to PE class? Does it make you want to be more physically active to earn more prizes?
5	Please describe a time when you felt like PE was boring or unfair and you didn't want to participate. How often do you get these feelings?
6	Please describe a time in PE when someone was mean to you. What did you feel like when that person was mean to you? Did this make you have a poor experience in PE?
7	Please describe your feelings about physical activity. Do you think it is important? Why or why not?
8	Please describe the attitudes of your classmates relating to physical activity.
9	Please describe your physical activity levels and some of the activities you participate in outside of school.
10	Please describe your experiences and feelings toward physical activity?

**Teacher Journal**

Each teacher participant completed three journal prompts (see Table 2) during the course of the study. Creswell (2007) identified journals as popular forms of data collection for case

studies and narrative research. I conducted a case study, and the design required the teacher participants to express their own perspective of positive reinforcement in PE. The journal prompts were emailed directly to the teacher, using the participant's personal email address. Using a personal address as opposed to the school address will prevent a third party's requesting their email records. I emailed the prompts to the participant at the start of the week and requested it be returned within 3 days. The participants were asked to return the completed prompt via email. Once the entry was returned, I saved it onto my secure research computer and deleted the email for security purposes.

Table 2

*Journal Prompts*

Prompt #	Journal Prompt
1	As a PE teacher you are confronted with different issues on a daily basis. In each situation, there are various strategies that you will use to address the situation properly. In the event a child is being bullied, how would you handle the bullying? Do you think students' motivation levels are negatively affected because of bullying? What strategies have you used to motivate the students that withdraw from physical activity because of a lack of motivation?
2	Describe the good and bad facets of positive reinforcement in PE on the students' motivation levels. Describe a situation when it successfully motivated a student and a time it was ineffective.
3	In your opinion, how have the student participants benefitted from PBIS that is contingent of positive reinforcement? Do you believe that positive reinforcement, with the use of incentives, plays a role in student motivation in PE? Do you think the positive reinforcement incentive program can be worth implementing in other schools?

**Parent Questionnaire**

To better understand parent perceptions of PE and how they value physical activity, I sent a questionnaire (see Table 3) home in the student participants' planners. Every elementary school

within the district uses planners to communicate with the parent/guardian of the student. The planner, contained material relating to the student's progress in class, was sent home every Friday by their general education teacher. The planners costs ranged from \$4-\$7; however, the cost is usually covered using discretionary funds and fundraiser assets for each student. The questionnaire was sealed in an envelope to prevent the form from being viewed by a third party. To ensure the parent's questionnaire could be compared to their child's data, I titled the form as the parent of the child's pseudonym of choice. If the questionnaire was not returned, then a second questionnaire was sent out in the following week's planner. I also offered the caregiver the opportunity to answer the questionnaire by email. A caregiver's perspective is critical: it assists PE teachers in creating new motivational strategies and identifying the factors that prevent extracurricular physical activity. Furthermore, it was necessary to identify these factors because past research suggested that the school's role in preventing obesity is different from what the parent's perceive (Murnan et al., 2006).

Table 3

*Parent Questionnaire*

Question #	Question
1	Please describe your feelings about physical education.
2	What positive or negative comments has your child mentioned about physical education? Physical activity?
3	How often are you physically active, and how do you encourage your child to be physically active?
4	What physical activities does your child participate in outside of school? Are there any circumstances that prevent your child from getting to participate in physical activity around the house?
5	Do you ever have the opportunity to take your child to the park, attend the YMCA, or participate in recreation leagues?
6	How can the school encourage your child to increase physical activity levels?
7	Do you have any suggestions that may improve your child's perception of physical education?

## **Data Analysis**

Creswell (2007) commented on the difficulty of data analysis, the complexity of dissecting the text and other sources of data represents a challenge for researchers using qualitative methods. Furthermore, examining, categorizing, and tabulating are applied during the data analysis process to gain a better understanding to the original argument of the study (Tellis, 1997; Yin, 1994). To handle the data as it is collected, immediately following each interview and journal prompt, I transcribed the session verbatim in a Word document and save to the password-protected research computer. To manage the parent surveys, I reviewed the data and saved it on the research computer. All of the electronic files were backed-up on an external memory drive, and then the external drive was locked in a filing cabinet in a secured office. The original data collection sources were destroyed.

After handling the data, I familiarized myself with the data collected by reviewing the interview responses, journal prompts, and questionnaires. As I read through the data, I made notes of common themes in the data. This was achieved by highlighting responses and important data from the transcribed material. The highlighted notes were saved as a new document. In doing so, I was able to track my notes and provide a clean document for a peer to review the transcribed material.

A collective case study design required specific data analysis procedures to identify the data relevant to the phenomena. To provide a proper data analysis, I followed Creswell's (2007) suggestions for a multiple-case design, which are within-case analysis, cross-case analysis, and assertions. Additionally, I made use of the worksheets that Stake (2006) endorsed to use during the data analysis stage of research.

During the within-case analysis period, I created word tables to capture findings and identify specific themes from each study. Identifying the themes of an each case with a detailed description allowed me to later identify the common characteristics that bound the cases together (Stake, 2006). While reviewing the data, I took notes using the guide created by Stake (2006), as shown in Appendix 1.

The guide shown in Appendix B is designed to record detailed notes for each individual case, resulting in well-organized data and identifying elements that make each case unique. Once each individual case was clearly analyzed, I advanced to the next stage of the analytical process. During the cross-case analysis step, I conducted an analysis of the entire collection of word tables and develop cross-case conclusions (Yin, 2009). Stake (2006) identified the purpose of the cross-case analysis is to find the theme or connection that exists across the cases. Creswell (2007) also defined this step as a thematic analysis across the cases. Following the cross-case analysis, the last stage is dependent on interpretations or assertions (Creswell, 2007; Yin, 2009).

To make assertions that are relative, I used a worksheet to chart the themes and findings for each individual case. Nolen and Talbert (2011) identified that assertions are based on the nature of the findings. To better prepare the final report, I used the tools shown in Appendix C and D, both designed by Stake (2006), for the purpose of rating each theme prior to making these assertions. Once the assertions were identified, I was able to use evidence to support each assertion.

Following the last stage of data analysis, I used the worksheets to complete the final report. The worksheets with notes are not presented in the final report for clarity purposes. Stake (2006) warned researchers of presenting completed worksheets because of clarity purposes.

### **Trustworthiness**

To achieve trustworthiness of my research study, I used multiple strategies to effectively address credibility, dependability, transferability, and confirmability. Schwandt, Yvonna, and Guba (2007) identified these criteria to establish trustworthiness in the study. Schwandt et al. (2007) suggested credibility as a measurement to internal validity, transferability for external validity, dependability for reliability, and confirmability for objectivity.

Credibility was achieved, utilizing multiple strategies. First, I established familiarity with the participants and setting, a strategy supported by Lincoln and Guba (1985). I already established a professional relationship with the teacher participants; this was accomplished during my tenure in the county. Prior to conducting the data collection methods, I piloted the parent survey questions, the student interview questions, and the teacher journal entries. The piloting took place at the school that I taught for convenience purposes. Creswell (2007) noted that piloting will assist in refining the interview questions and can be conducted at any site that is convenient to the researcher. I met with the students prior to the interviews and participated in their PE class to afford them the opportunity to grow more comfortable with my presence. During the initial meeting, I did not talk about PE, motivation, or positive reinforcement. Instead, I talked with them about their special interests not related to the study's topic. I provided a personal bio to the parent participants to help them better understand the purpose of the study, furthermore, to establish trust between the parent/guardian and researcher. Lincoln and Guba (1985) also suggested achieving triangulation and peer debriefing as a means to bring credibility to the study. In order to do this, I used multiple data collection sources and allow a disinterested peer to critique the material (Lincoln & Guba, 1985). Additional strategies that were implemented for credibility purposes were providing opportunities for participants to withdraw

from the study and articulating my background, experience, and credentials in the narrative (Shenton, 2004)

Reliability and dependability are synonymous, and it is important to define reliability to bring clarity to the subject. Reliability evaluates the quality of research being administered (Golafshani, 2003). Following and completing a traditional collective case study design required extensive collection methods to obtain data that yielded data that could be used for the benefit of explaining the phenomenon. The narrative portion of the study explained the background, collection methods, recommendations, and conclusions of the research, thus leading to dependability of the study. To ensure I followed these components of a collective case study, I relied on an audit trail to examine the process (Schwandt et al., 2007). Furthermore, a fellow colleague reviewed the data from the collection sources that allowed us the opportunity to compare the themes and interpretations that emerge (Baxter & Jack, 2008). The peer review consisted of a review of the within-case analysis, cross-case analysis, and assertions (Creswell, 2007).

To develop a study that has transferability, I followed specific guidelines and included pertinent information of my research. Using a descriptive data narrative made it possible for other researchers to use the results elsewhere (Schwandt et al., 2007). This required a thick description (Schwandt et al., 2007) to communicate the methodology and results efficiently to the audience (Ponterotto & Grieger, 2007). Providing a thick description yielded a dense interpretation (Denzin, 1989; Ponterotto & Grieger, 2007), which led to a purposeful meaning (Ponterotto, 2006; Ponterotto & Grieger, 2007). Shenton (2012) recommended the following: organization information, restrictions of the participants, the sample size, description of the

collection methods, and time frame of the methods. All of the questions were incorporated in the narrative portion of my study in order to ensure transferability.

Finally, the issue of confirmability required appropriate measures be in place to ensure feasibility. Shenton (2012) categorized confirmability as the comparable concern to objectivity for a researcher. Attaining triangulation and monitoring procedures through review increased the reliability of the study. Stake (2006) noted that triangulation across cases is similar to single cases, but cross-site triangulation requires constant discussions with peers who can find faults embedded in the manuscript. This was only possible by examining and evaluating the progress of the research to make certain there are no discrepancies. The audit trail was used to establish confirmability to examine the data and reconstructions (Schwandt et al., 2007).

### **Ethical Considerations**

There are ethical issues and implications that have threatened the reliability of the study. Creswell (2007) suggested an array of ethical issues will arise throughout the study, and a qualitative researcher will be challenged during the process. It is critical that I had the appropriate measures in place to prevent any unethical events from transpiring during the study; if they did, I was prepared to address them effectively. My ethical concerns were primarily related to the participants' confidentiality and their disposition during the study. To protect participants' identity, I allowed the participants to select their own pseudonyms. A list of the students' actual names, matching their pseudonyms, was locked in a filing cabinet located in a secure office, away from the research sites. The parent questionnaire was identified as the parent of the child's pseudonym. To protect the data from being reviewed by a third party, the data, including interview recordings, journals, and surveys, was destroyed after it was saved to a

password-protected computer. Accompanying these ethical concerns were potential implications that were taken into consideration.

The students within the school district were exposed to an extensive Character Education curriculum and a positively reinforced environment in their PE setting. These factors were potential implications in the research data collection process. The students may have chosen not to answer truthfully during the interview process because they perceived their responses as hurtful. To ensure this did not transpire, I spoke to each student independently to reassure their safety and encourage them to answer the questions to the best of their knowledge. I limited the interview sessions to 15 minutes of the interview to ensure the participants do not get bored or lose their focus. Instead of asking the interview questions in one session, I split the interview session into two segments. Each session was conducted on different days to allow the participant to refocus and offer a thoughtful answer. This procedure improved the interview process by reassuring the students that it is okay to articulate their feelings. Creswell (2007) suggested that interviews are time-consuming, especially for young people that may have difficulty articulating their feelings and ideas. The participants' responses to the interview questions, journal prompts, and questionnaires can be used to improve the PE environment and too remove the influential factors that demotivate students. The participants were not required to answer all of the questions, especially if they were uncomfortable about the topic. Under the parameters of the study, a question was asked to discover if the students have been bullied. Although no student expressed any distress, it was taken into consideration that the participants may become emotionally distressed because of previous bullying experiences. If so, I would have referred the student to the school counselor, and their caregivers would have been notified of the incident. Under the circumstances a participant's wellbeing was threatened, he or she would have been

removed from the study. At any point they desired, the participants could have ceased participation in the study.

## CHAPTER FOUR: FINDINGS

### Overview

The purpose of this chapter is to present the findings and data analysis of student interviews, parent questionnaires, and teacher journal prompts specifically aligned with the primary research question and the secondary questions. The rationale for this study was to identify the influential factors associated with the use of positive reinforcement in a third-grade physical education (PE) class and leisurely physical activity. Ultimately, school leaders, PE teachers, and caregivers can use the data to better understand what factors motivate and demotivate elementary-aged children to engage in PE and leisurely physical activity. The positive impact of identifying such factors will lead to higher engagement levels in PE, a potential increase of physical activity levels of children, and, most importantly, the documented health benefits associated with a physically active lifestyle.

The primary research question that navigated this collective case study was:

**RQ1:** What factors positively influence elementary school students to be physically active and engage in PE classes?

Additionally, the study also relied on secondary questions as means to distinguish other factors that are correlated with motivation and physical activity:

**RQ2:** What factors do students identify as significantly influencing their motivation to be physically active?

**RQ3:** What is the role of caregivers in their children's motivation to be physically active?

**RQ4:** How can educators influence students' motivation to be physically active through positive reinforcement?

## **Participants**

Each case study involved third-grade students enrolled at a Title-1 elementary school in a small town located in North Carolina. Field Elementary, Gorge Elementary, and Lauder Elementary were the sites where the research study was conducted and data were collected, using a variety of methods. In the data collection process, 18 students (nine males, nine females) from the three different elementary schools, 18 parent/guardians of the student participants, and three physical educators (one male, two females) participated. Student interviews, teacher journal prompts, and parent surveys were used to identify the influential motivating factors which impact the engagement levels of students in PE and leisurely physical activity. Each student represented a single-case, identified using a pseudonym of the student choice. The students' ages varied: 11 of the student participants were 8 and the remaining seven students were 9. The students were selected based on their Likert-scale scores: the Likert scale consisted of questions related to PE and physical activity. The two lowest-scoring and the single highest-scoring male and female participants from the Likert-scale results participated in the study.

## **Results**

The rationale for this study was to identify the influential factors associated with the use of positive reinforcement in a third-grade PE class and leisurely physical activity. Student interviews were used to gain a firsthand perspective of the possible factors that students experience while in PE class; parent/guardian questionnaires, used to better understand possible factors at home that influence leisurely physical activity; and the PE teachers' journal entries, used to investigate how positive reinforcement is utilized in the class to motivate students in class. The data collected from interviews, questionnaires, and journal entries helped to comprise a narrative relative to the themes that emerged from the study. The students articulated their

thoughts and feelings, but their responses varied in length. The length of the caregivers' responses also varied: a few caregivers answered questions with one-word replies, while others used paragraph form to clearly answer the question. The teachers all wrote in-depth responses to clearly express their experiences and opinions relating to the themes.

The themes that emerged in the study were:

- Based on the students' experiences, the factors that significantly motivate participation in PE and physical activity.
- Caregivers' role in their child's motivation to engage in PE and physical activity.
- Educators' strategies to influence students' motivation in PE and to be physically active utilizing positive reinforcement.

The open-ended interview sessions allowed the students to freely express their opinions about PE and leisurely physical activity: as a result, the students' responses could fit into all three themes. The students were asked a series of questions that were open-ended, and the interview was conducted over the course of two sessions. The 10 questions were written to analyze the students' perceptions of PE, physical activity, and positive reinforcement. Students were given adequate time to reflect upon each question, and some of the students articulated more than others. Additionally, the questionnaires were designed to better understand the caregivers' perceptions of PE and physical activity. To ensure triangulation, the opinions of the teachers regarding the use of positive reinforcement were collected, relying on journal prompts. The data was reviewed thoroughly, and then the themes were identified. Each theme is comprised of assertions, specifically identified based on the recurring terms from the data collection sources.

## **Theme 1: Based on the Students' Experiences, the Factors that Significantly Motivate Participation in PE and Leisurely Physical Activity**

The most common influential factors which impacted a students' motivation were positive reinforcement, friendship, and negative altercations during class. These three factors identified during the interview process led to assertions based on the students' experiences. Students identified these three influential factors and supported their opinions with previous experiences in PE and in leisurely physical activity.

**Positive reinforcement.** The use of positive reinforcement motivated many of the students to engage in PE and even supported leisurely physical activity. All three schools have some form of positive reinforcement in place; however, how each PE teacher implements the strategies of a positive reinforcement system varies. Although each school's PE program implements PBIS strategies differently, the teachers offer incentives that utilize rewards and praise to reinforce appropriate behavior. Overwhelmingly, 16 of 16 students had only positive experiences with the use of positive reinforcement in PE; however, the desired outcome to increase engagement in PE and physical activity levels differed. Two students did not believe the use of awards or prizes increased their involvement in either PE or leisurely physical activity.

Mrs. F, PE teacher at Lauder Elementary, uses positive reinforcement to motivate students to pursue healthier lifestyles and to stay on-task during class. In order to do this, she praises appropriate behaviors by awarding tickets to students who follow instructions. Additionally, Mrs. F motivates students to pursue higher fitness levels by challenging them to join the 100 Mile Club, a form of positive reinforcement. Students have the opportunity to complete miles around the track in PE and during recess. She also goes further to identify students as PE player of the month for each class. The strategies are consistent with a PBIS

system and prove to be successfully motivating students in her class. Dolly, for example, expressed her joy with PE and her excitement about physical activity:

Last week, I received the PE award for being the best kid in the class. It made me feel great: I thought to myself that hard work pays off and running the 12 miles was worth it. I run every night: I really like running, and it was a big deal. I want to go back to PE every day and be physically active. Earning a reward makes it even better to love PE and running.

Other students from Lauder Elementary indicated their eagerness to participate in PE and physical activity. Katy was overjoyed to share her news, “When I got athlete of the month, I felt amazing. I really enjoy PE and physical activity.” Staff also received an award for his accomplishments, “I was given a 100 mile t-shirt and a certificate for the athlete of the month. I felt awesome for getting it, and it moved me to work harder.” One student did note that the possibility of earning an award did not make him want to go to PE, but it did boost physical activity levels. According to Zombie, “Earning a reward does not make me want to go to PE, but earning a ticket makes me want to be physically active.” Zombie was the only student who believed that incentives did not motivate him to increase their immersion in PE. However, he did identify that he increased his physical activity levels as a result. Field and Gorge Elementary schools had similar results: all of the students pinpointed the positive outcomes of using a system that reinforces commendable behaviors and accomplishments.

Field and Gorge Elementary schools use a pin-up chart that awards students tickets to be used to purchase special gifts at a later time. The chart is a baseball diamond that uses baseball terminology as a way to monitor classroom behavior. Individual students can also earn tickets for modeling behaviors deemed commendable by the teachers. The tickets can then be redeemed for

incentives that reward the whole class. Teddy, from Field Elementary, spoke about his first time receiving an award:

When we do terrific kids, I only got one PE award. It was for what I was supposed to be doing in class. It made me feel happy, because it was my first award ever at Field Elementary. I was listening and following directions and earned the award because of it. I believe the awards are good because it makes me want to come to PE. Plus, I probably would be more physically active because an award is very hard to get, and you have to do what you are supposed to do to get it.

Sarah, a vivacious personality, praised Mr. D's class. When asked, "Does earning a prize or reward make you want to come to PE?" She immediately responded, "Yes, I kind of want to go outside and run around." This indicates that students not only responded to rewards by voluntarily engaging in PE, but also desire to increase physical activity levels on their own time, potentially as an alternative to other non-healthy behaviors.

Kate and Messi, students at Gorge Elementary, also had only good things to say about the use of positive reinforcement. Kate earned a token for her class as an individual: she concluded, "When you do good, Mrs. S gives you stuff. One time I was the quiet one, and she gave me a token. It made me feel great and made me wish we had PE twice a week." Messi interjected his desire to earn more tokens in hope to earn a prize: "Sometimes, I get a prize with the tokens I have collected. I have five now: I want to get a temporary tattoo with them." He also emphasized the need for offering worthwhile incentives. According to Messi, "The PE teacher will give us a fun day if we earn enough tokens. It makes us want to work hard. We can get lots of equipment to play with on fun days." Fun days seem to be a prize that the students at Gorge Elementary strive to achieve, as Nemar also identified a fun day as an enjoyable experience: "I earned a fun

day by making all-stars. I would enjoy PE more and be more physically active for a fun day.” Bella, on the other hand, offered a different perspective to her peers. She did believe a positive reinforcement system increases her desire to be in PE; she then talked about physical activity: “I don’t think it makes me more physically active.” Sam provided a different perspective regarding the value of a token: “I have never received a prize: Mrs. S does not do that stuff. She gave us a token and got a fun day on the scooters. It made me happy because we earned it.” Sam was a lower scoring participant, and he does not identify the token as a reward; however, he still benefitted from a system that rewards positive behavior. These promising viewpoints of positive reinforcement strategies in PE indicate a favorable impact on students’ motivation.

**Friendship.** The impact of friendship on the leisurely physical activity levels is significant. Based on the students’ responses, the decision to pursue leisurely physical activities suggested that most associated healthy relationships with friends as a key influential factor. Robust relationships can be invigorating and promote a critical wellbeing for young people (Ojanen, Sijtsema, Hawley, & Little, 2010). Under the premises, these friendships can lead to various forms of play; most importantly, students who have the ability to establish strong relationships with their peers potentially will increase their motivation to be physically active while away from school. Based on these findings, 15 of 16 students referred to interacting with a friend(s) while playing at home.

Lucy of Field Elementary responds to her activity levels outside of school: “Most of the time, I go to my friend’s house and play in the tree house. We also like playing tag and hide-go-seek.” Her experience is not unusual: friends have an astounding correlation with leisurely physical activity levels. Rio enjoyed games outside of class with his friends, more so than he does in class. He stated, “I don’t always like playing games in class; but, when I get home, I will

play football, basketball, and tennis with my friends. I like PE, but I like playing with my friends and talking.” Students from all schools mentioned playing with friends during leisurely activities. Kate has recently moved into a new neighborhood around Gorge Elementary and still expressed a significant correlation with physical activity and friendship: “You can ask my friend--I ride my bike all of the time, and I don’t want to get off. I go down to my friend’s house, and I ride it around her circle.” There was one individual who mentioned she did not have any friends around her home. Sally, a girl at Lauder Elementary, hesitantly answered, when asked if she has any friends around to play with in her neighborhood, “No, not yet. I do push-ups and sit-ups inside and when my god-brother comes over.” Sally did not mention how often she is physically active nor did she discuss how often her god-brother comes over to play. Sally was the lowest-scoring female on the Likert scale at either site. Additionally, she was the only student who did not mention playing with a friend(s) while at home. Young children’s growth and development depend on healthy relationships. Friendship is a developmental process that includes interactions necessary for young children’s psychological wellbeing (Borenstein, 1996).

**Bullying.** The students recognized that a poor perception of PE and of physical activity was associated with negative experiences that stemmed from bullying or inappropriate behaviors of other students in class. The negative impact that bullying potentially could have on the motivation level of individuals has been documented: victims of bullying are likely to experience lower achievement levels in education (Popp, Peguero, Day, & Kahle, 2014). This is also true in PE: a majority of the students who have experienced a form of bullying or witnessed classroom misbehavior increased their motivation level in PE. Of the 16 students, 12 students recalled an occasion in which a student was being mean to them or another student and the negative feelings that were associated with the occasion.

Dolly was honest in her interview, especially when questioned about someone being mean in PE and the impact on her experience in PE:

Well, I can say I was mean to someone. I think one time when Aiden said something mean to me, but I usually have good days in PE. It made me feel bad about being mean. My friend hurt my feelings, and then I was mean to someone else. It all hurt my feelings and ruined my time in PE. I just wanted to leave.

Julia had similar a similar experience at Field Elementary:

There was this guy in my class last year, and he was mean to the entire class. He would say “shut-up” to the entire class because kids can be noisy sometimes, normally in gym. It didn’t make me want to leave PE, but it made me feel bad.

There was also a student who feared ridicule because of failing in PE, due to an inability to perform. Elsa, a third- grader from Gorge, praised the value of PE and physical activity, but made a point to identify physical activity as a necessity to prevent bullying. According to Elsa, “If you want to be healthy, you have to exercise more, and people will not make fun of you and call you weak.” One of the most notable interviews was Shine, Shine’s desire to be physically active is great: “I think physical activity is important, because, if we don’t participate, our arms will be like jelly.” However, his emotional sensitivity, attributed to the possibility of failing, results in a poor experience. He also alluded to a situation in which he was punished, and it was not his fault. Both of these incidents resulted in a decrease in motivation and the desire to leave PE:

There was a time when we were walking around the gym, and we got so loud and were running; we got into trouble. Mr. D didn’t want us to run, and some of the students started running. I wasn’t running, and we still had to walk extra minutes because of the

other students. It wasn't fun, and I wish I wasn't there. There was also this one time we were playing a game, and I was thinking how to move, then someone started being mean to me. They started yelling at me, and it made me really mad. I didn't have a good time at PE.

Silver from Field Elementary also recalled an occasion that led him to ask Mr. D to sit out and leave, "People would come up to me and be mean and tell say, 'I don't like you.' It made me want to leave and sit out." These occasions contributed to a negative experience for the students while in PE; as a result, the students' emotional wellbeing and attitudes toward PE and physical activity increased their desires to not participate.

The fundamental views of the students, relating to positive reinforcement, friendships, and inappropriate behaviors, appear to be the most influential factors that impact the motivation levels of students in PE and leisurely physical activity levels. The students spent more time conversing about these three factors than any other factors. Their opinions were organic and specific to the questions. They specifically expressed their feelings about these factors based on their experiences. The students' experiences confirm the applicable assertions: Students' motivation to actively engage in PE and leisurely physical activities increases when there is an incentive to do so; they are increasingly more likely to be physically active at home when they have friends to play with in the neighborhood; and their desire to participate in PE is higher when effective classroom management prevents bullying and other students' poor behaviors from negatively impacting their achievement levels in class.

## **Theme 2: Caregivers' Role in Their Child's Motivation to Engage in PE and Physical Activity**

A child's motivation to succeed in any circumstance is truly dependent on a home environment that supports and values the children's achievement. Praise, for example, is an element that could be found in a home environment that exhibits these attributes. Praise is a reflection of what caregivers value and believe; most importantly, the children within these households, where praise is prevalent, understand the viewpoint of their caregiver (Gunderson et al., 2013). Caregivers play a significant role in their children's perception of PE and physical activity. Most importantly, parents can ensure their child values specific characteristics that are critical for his growth and development. Maintaining a fit lifestyle requires daily physical activity or exercise. Young people can accomplish this by voluntarily participating in leisurely physical activity and engaging in PE. The caregivers' role to persuade their children to value physical activity and PE has been clearly defined, utilizing the questionnaires and student interviews during the data collection process. The questionnaire consisted of six short-answer questions. The purpose was to investigate the caregivers' perceptions of PE and physical activity. Additionally, the questionnaire contributed a caregiver perspective to delineate the role a caregiver plays in his or her child's motivation to engage in PE while at school and leisurely physical activity at home.

Each caregiver's response was unique: each questionnaire identified specific factors that he or she characterized as significantly influencing his or her child to pursue an actively engaged lifestyle. Although each questionnaire may be exclusive to each individual case, through detailed data analysis, it was possible to identify connections among their responses and the role of the parent, guardian, or caregiver. Based on the results, a caregiver plays a significant role in

motivating PE engagement and leisurely physical activity: a parent must model a physically active lifestyle by orchestrating activities that allow a family to be active together; a parent should praise physical activity by encouraging his or her children to play or participate in activities that require physical movement; and a parent must communicate with his or her child's school to better understand the goals of PE.

**Organize and participate in leisurely physical activities as a family.** Organizing physical activities does not require intensive planning with lots of equipment. Most of the activities reported by the caregivers were simple physical activities that could be completed with little or no equipment. The most common component of the questionnaires was the fact that, the more active the families were together, the more active each individual child was, according to the parent questionnaires. Of the 18 questionnaires, 12 caregivers alluded to the fact that they were active as a family on a regular basis through various physical activities.

If the caregiver does not embrace an active lifestyle or attempt to be physically active with his or her child, the child will likely not be physically active. One caregiver professed that neither he nor his child is as active as he should be on a regular basis. Shine scored low on the Likert scale: according to his caregiver, "We are not very physically active for the reason that we work all of the time. He plays outside in the yard, after a while his legs begin to hurt. We mostly take him to the park, but not often." Messi's caregiver noted the positive correlation between parent physical activity levels with child engagement levels. Messi's caregiver noted, "We, as a family, always play badminton outside. We play together, so that makes him want to do the same."

Katy's caregiver identified how she was active and how it ensured Katy's activity levels were managed:

I am physically active every day, whether it is doing yoga in the living room or walking to the store. If it is a pretty day out and we need to go ½ mile to the store to buy a drink, I will get Katy to walk and it excites her.

Physical activity as a family proves to be a common practice among the families. Multiple caregivers reiterated their involvement with physical activity as a family to confirm the importance of physical activity at home.

**Allow opportunities for physical activity in the community and neighborhood.** A caregiver must strive to provide opportunities for his child to be physically active outside of school. Providing various opportunities for physical activity that embody forms of play affords young people the chance to interact with their peers in their neighborhood. The questionnaire revealed that 18 of 18 respondents allowed their children to be active at home. Most importantly, the responses revealed that all of the children were physically active at home: however, this is only possible because the caregiver approves of an active lifestyle.

Young people are motivated by the actions of their caregivers, especially when the caregivers show support for a particular component of their children's lives. In terms of advocating for active lifestyles, participating in fitness programs offered by the school and making use of parks, wellness centers, and recreation leagues in the area are common strategies. Taking advantage of the available resources within the community or neighborhood is an essential element to getting young people active on their own time.

At no cost to the participants, the Lauder Elementary running club and access to multiple parks located within the school districts are advantageous to all of the town's residents. First, the running club at Lauder is a free afterschool program offered to the students to develop a stronger understanding of the skills necessary to be a long distance runner. Of the six students at Lauder

Elementary, four of them are members of the running club at the school. Dolly's caregiver identified Mrs. F's club as a positive influence for her physical activity, "Dolly enjoys physical activity. I believe this is due to her physical education teacher, Coach F. She is a member of the running club and ran a 5K last year." Dolly's caregiver was not the only caregiver of a member of Lauder's Running Club who identified it as a positive component in their child's learning experience. Sarah is now a student at Field Elementary, but a former student and member of the running club at Lauder: her caregiver added, "I liked the running club from last year. Sarah enjoyed that club." Currently, Field and Gorge Elementary do not offer running clubs; as a result, it is impossible to assume similar praise from the students.

The park was also an additional resource, free of charge, where a majority of the caregivers took their children. An overwhelming number of participants identified the park as a place for the students to play and be physically active. Fifteen of the caregivers mentioned taking their child to the park. Sally's caregiver conveyed an active lifestyle in the community, "We try and walk at least 3 days a week. We walk around the block where we live. We get together with family and friends and walk the trail or play in the park."

Staff's caregiver reluctantly provides Staff with multiple opportunities to be active, "Staff plays soccer twice a year, fall and spring. We go to the park all the time. Staff also goes to the YMCA five days a week for afterschool care." Sam also has the benefit of playing with his friends at the YMCA's afterschool program before going home, where he has no friends to play with outside. Sam reiterates the necessity to provide these additional opportunities:

I play ball with my friends in afterschool care. We play tag, football, basketball, and this other kind of stuff. I do not have any friends at home, but I play in afterschool care with them. I ride bikes with my brother and sisters after I finish my homework.

The YMCA and recreational leagues cost money, an additional cost that many families may not have the ability to afford. There are factors that must be identified—elements that hinder or prevent a child’s opportunity to be physically active. A couple of caregivers identified homework and weather as factors that may prevent leisurely physical activities for their child; however, technology, work schedules, and the expense of YMCA memberships and recreational leagues are influential factors that negatively impact their child’s physical activity involvement. Zombie’s mother identified the impact money and work can make on a child’s involvement. Most importantly, her comments particularly stress the necessity of being active as a family. She pointed out, “We do not have the money for recreation leagues right now. And I work 12 hour shifts.” She was not the only participant who discussed the expense associated with sources of physical activity. Katy’s caregiver also had an issue with the price of a YMCA membership: she explained, “We do take Katy to the park. We like to walk on the walking trails that are available. We also have visited the YMCA, but we are not a member: it is a bit pricey.” The price of recreation leagues and memberships to special programs, such as the YMCA, are factors that may not be considered without appropriate funds, dependent entirely on the family’s revenue. However, to engage in leisurely physical activities at home does not always depend on a family’s monetary funds.

**Take an active role in your child’s education.** To ensure the highest achievement levels, a caregiver and teacher must collaborate with one another to guarantee the students are provided with the best possible learning experience. The questionnaires also provided the opportunity to discuss how the school could improve the physical activity levels of students and their child’s perception of PE. Overwhelmingly, the responses were positive and offered insight into how parents perceived the role of the school in this matter. As a result, there is a necessity

for parents and teachers to communicate on a regular basis to potentially achieve health-related goals. The recommendations by the parents are worth identifying: the four tactics which parents articulated to be the school's role to impact productivity in PE and increased levels of physical activity are: encouragement, quality afterschool programs, and focus on the benefits of physical activity.

The biggest emphasis relating to the school's role in increasing physical activity levels and improving students' perception of PE is the use of encouragement. Caregivers expressed the notion that a school must rely on encouragement to improve the two components being studied. Caregivers interestingly mentioned finding activities that are fun for the students to encourage a proactive perspective of PE and physical activity. Caregivers accentuated that making physical activity and PE fun is the key to encourage productivity. Staff's caregiver acknowledged the importance of fun: "Help Staff see that physical activity can be fun." Rio and Elsa's caregiver agrees, "As long as he is having fun, he has no problems," and "Just make it fun," proving that caregivers identify enjoyment as a key to motivation. Katy's caregiver also deemed fun to be a primary factor in a child's engagement, she added, "Making PE fun instead of seeming like work helps out."

Other comments from caregivers indicate that the role of the school is to introduce various activities for the students' enjoyment. The caregivers of Zombie, Lucy, and Shine suggested that aligning PE and school activities with personal preferences might be beneficial to encourage students. Shine's caregiver spoke empathically about the subject:

We really do not know how the school could encourage physical activity, because he does not like to play sports. He just likes to stay in and watch TV. Our suggestion is for the school to encourage him to liking some sport.

Shine's caregiver's idea of discovering the interests of the child mimicked the point of view of Zombie's and Lucy's caregiver.

Zombie's caregiver suggested "teaching him the games at school, so he can play at home." Lucy's caregiver added, "Find a fun activity. Help the student find a sport that they can enjoy. Also choose an activity that is developmentally appropriate." These beliefs further explain the importance of parents' communication with their child's school. Sally's caregiver expressed her satisfaction with the school in the subject matter, she added, "Our school is always encouraging our kids with different activities throughout the year." Sally's caregiver's opinion is important to include because she is a student at Lauder Elementary where a club is offered to the students. It also may further explain that caregivers perceive the role of schools to be to offer afterschool programs.

Caregivers agree the necessity for afterschool programs as a method to increase physical activity levels among the students. Several caregivers were in agreement about the value of afterschool programs that positively influence young people to engage in physical activity. Nemar's, Sarah's, Dolly's and Katy's caregivers reflected on the importance of the schools' offering an extracurricular activity. "The running club and the 100 Mile Club have been excellent stimulators for Dolly. I credit this to Mrs. F," said Dolly's caregiver. Sarah's caregiver relayed a similar comment, "I liked the running club from last year. Sarah enjoyed that." The praise for clubs continues, based on Nemar's caregiver's responding to improving physical activity levels in school, "Making afterschool activities that deal with physical activity," is the possible solution to increasing activity levels. Additionally, Katy's caregiver celebrated Katy's increased interest in physical activity due to the running club at Lauder Elementary, "I think the

100 Mile club is a good thing Mrs. F does to encourage Katy to want to run or walk. She also participates in the running club in the spring.”

Finally, two caregivers also reiterated the necessity to go further to educate the students on the health benefits of maintaining a healthy lifestyle. Plus, they emphasized how teacher praise can impact motivation levels. In these responses, the caregivers affirm the teachers may improve a child’s perception of PE. Nemar’s and Silver’s caregivers suggested that the school should focus on the positive outcomes associated with active involvement in PE as a strategy to make the class more appealing to the students. Nemar’s caregiver suggested “talking to him about the advantages on practicing physical activities and why it is good for his health.” Silver’s caregiver added a suggestion to perhaps improve Silver’s perception of PE, “Go more into the culture of exercising, i.e., make you strong, keeps you healthy.”

The caregivers responded to all of the questions with clarity. Although some of the responses were more detailed than others, it is possible to make an assertion relating to the caregiver’s role in motivating his or her child to be physically active and engage in PE with a positive attitude. To increase a young person’s motivation to engage in PE and leisurely physical activity, a caregiver’s family must be active as a family; caregivers must provide opportunities for their children to be active in the community; and the caregivers must take an active role in their children’s education.

### **Theme 3: Educators’ Strategies to Influence Students’ Motivation in PE and to be Physically Active Utilizing Positive Reinforcement**

The third theme is constructed by applying the expertise of the educators relating to positive reinforcement in the classroom. The teachers from each site had the opportunity to contribute their perspectives of positive reinforcement and the engagement levels of third-grade

students. The participants clearly defined strategies that will potentially improve the overall activity levels of students. Additionally, the teachers have direct contact with each student at the school where he or she teaches.

All PE teachers are certified instructors who have earned a teaching licensure from accredited institutions. Their mission is to provide an educational experience that challenges, rewards, and teaches students the value of a healthy lifestyle, which routinely relies on regular physical activity as a major component of their curriculum.

The journal prompts completed by the teachers were used for the intent of gathering specific strategies used by the teachers at each site. Furthermore, the purpose of the entries was to investigate strategies that impact the motivational levels of the students in a class that utilizes positive reinforcement as a means to support positive behavior outcomes. Factors emerging from the journal prompts were: an assortment of strategies to handle bullying appropriately; how positive reinforcement impacts the students' perceptions of PE; and how students can benefit from the use of an incentive program.

**Strategies to address bullying.** From the interviews, the student participants had an opportunity to respond to questions about poor experiences in class or with physical activity associated with bullying. A majority of the students who responded mentioned times when other students were mean and negatively affected their attentiveness and eagerness to engage in the content being taught. Additionally, the students also mentioned a feeling of low self-esteem and desire to withdraw from physical activity.

The teachers responding to the first prompt provided their experiences regarding bullying incidents at their school site. Both teachers and students recalled past incidents involving

bullying. How teachers addressed bullying varied, based upon what they perceived to be for the benefit of the students.

Mrs. S, Mr. D, and Mrs. F all agree that bullying has a negative impact on the child's motivation in PE. Mrs. S at Gorge Elementary recognized the adverse effect of bullying:

I do feel that students' motivation levels are affected because of bullying. Students do not want to try/participate in activities if they know that the bully will dislike or make fun of them, especially if the student has a higher skill level than the bully.

Mr. D also reiterated the consequences of bullying on a student's motivation, specifically that the students become disinterested in the activity once exposed to bullying:

I do think that some students' motivation levels are negatively affected. I don't see a lot of bullying, but what little bit I do see, most students don't let it affect them. They become disinterested for a moment and then pick right back up where they left off.

Mrs. F at Lauder reaffirmed the harmful after-effects of bullying in an elementary PE student's experience in class. According to her accounts:

I believe that students' motivation levels are negatively affected due to bullying. If a student is bullying another student, he or she is using words or committing actions that are emotionally or physically hurting the other student. If a student feels hurt, his motivation to do anything is negatively affected because he is focused on his feeling.

To alleviate the students' stress and unwarranted feelings regarding bullying while in PE, each teacher takes different steps to address the situation judiciously. The teachers took action to reprimand the acting out student, and then counseled the students who were afflicted with emotional distress by the incident. The opinions of the teachers are all based on previous experiences.

Mrs. S followed protocol that is required by the administration at her Gorge Elementary and handled the situation with the assistance of administrators. According to her accounts:

At our school I would have to complete a write up of the bullying situation and turn it in to the office. To complete the write up, I would speak with the student who was being bullied first, so I can get an understanding of what types of behavior—words and/or actions—the bullying student was using. I would then speak with the student who was doing the bullying, to get his side of the situation. This information would be written down and turned in to the guidance counselor and principal for further review.

Mrs. S's actions indicate that her school takes bullying seriously and addresses certain behaviors with professionalism. She also goes further to address bullying in her class with particular strategies:

Within my classroom, I would talk to the students about respecting each other and only using positive/nice words to each other. I always ask the bully how they would feel if the roles were reversed or what if it was a family member getting bullied. They seem to change their minds about their actions once they have done this. If I observe any other issues with the students, I will try my best to keep them separated during my class activities.

Mrs. S's strategy to place the acting out student in a scenario in which he or she was being bullied, potentially deflects the poor behavior.

Mr. D reacted to bullying similarly to Mrs. S; however, he consulted the child before consulting the principal or classroom teacher. He discussed his reaction and strategy, "If a child is being bullied in my classroom, I am first going to talk to the child responsible for the bullying. Afterward, I am going to consult with the principal and classroom teacher to address the

bullying.” As a strategy for the student affected, he used praise and additional leadership roles:

Most students who withdraw from an activity in my class withdraw because of embarrassment or they simply are “winning” the game. I try and motivate these students by letting them know how great of a job they are doing. I also let these students be my helpers for that day.

Assigning roles that require specific duties may empower the students to be more focused on the objectives of the class. Most importantly, the students may forget about the most recent situation in which they were bullied.

Mrs. F also responds to bullying by internally investigating the incident, and then using administration if necessary. She explained:

If a child was being bullied, I would first separate the two children. I would then ask each child separately what was said and done. I would talk to the child who was bullying and remind them of the effects that their words/actions have on others. I would then have the child doing the bullying apologize to the student he or she was bullying. If necessary, I would send the student to the office to speak to the principal or send him to our PAWS Room to speak to the counselor about his actions.

Mrs. F uses praise as a means to motivate those students who have poor motivation within her class. Using the positive outcomes of praise, she is able to increase the students’ motivation to engage in class. Mrs. F explains her strategy of using praise:

My main strategy that I use to motivate students that withdraw from Physical Education because of lack of motivation is Specific, Positive Praise. I have found that all students love to be praised. Specific, positive praise also encourages and motivates them to continue doing their very best at the task at hand.

**Using positive reinforcement to motivate students.** The role of using positive reinforcement in the class is to better motivate students to focus on academic achievement by reducing problematic behavior, using various forms of incentives to reward desirable behaviors. All three teachers practice the use of positive reinforcement in the classroom and agree there is a place for it in PE. However, to ensure it is an effective strategy, the teachers concur that how it is used determines the success of using such a program. Each teacher offered a different perspective, but ultimately utilized positive reinforcement to increase a child's motivation to engage in class.

When asked about the good and bad facets of positive reinforcement, Mrs. S first responded with the good characteristics:

Some students will participate more when they know the teacher is looking for good behaviors. The students who are rule followers all the time now get a chance to be recognized. Some students will be motivated if they receive positive reinforcement if they don't normally hear positive things. It might only take that one positive reinforcement to change a child around.

Although Mrs. S identified that the use of positive reinforcement has the potential to guide students in the right direction; however, the use of positive reinforcement has drawbacks. She explains:

I feel some students will participate only for the moment to earn a "token" but the behavior has not been corrected for good. If the teachers are not consistent with giving positive reinforcements, then students who don't want to participate will not change and could cause other students to become less motivated to participate.

Based on her beliefs, the teacher must sustain a rational pattern of classroom management. Essentially, the teachers must pay close attention to how they acknowledge and reward appropriate behaviors or accomplishments in the classroom. Additionally, the use of a positive reinforcement system may only correct undesirable behaviors briefly in response to the possibility of earning a reward.

Mr. D offered his own perspective of positive reinforcement, “Most of the time positive reinforcement boosts their motivation. I don't think I have ever had a student to be negatively affected by my being positive to them.” Since there have been no drawbacks with using positive reinforcement, Mr. D supports the positive outcome of utilizing it when necessary.

Mrs. F has a different perspective of the role of positive reinforcement, compared to the other teachers. She does not think positive reinforcement has any negative overtones. In fact, she explains it can only be improved. Mrs. F stated:

I do not think positive reinforcement can be “bad”; however, it can be “better” if it is specific. For example, if I tell students “good job,” that motivates them, but it is not motivating them to continue thinking about and working on a specific skill. If I say, “I love how you are dribbling the ball with your fingertips,” they will remember that specific, positive praise and continue working on that aspect.

Overall, the three teachers agree that there is a correlation between positive reinforcement and motivated behaviors to perform in class. However, two of the three teachers believe it can be used more efficiently to become even more impactful in the classroom. The way each teacher utilizes positive reinforcement is unique and was investigated during the study.

Mrs. S offered two different scenarios in which she employed positive reinforcement and received different responses from the students. First, she explained a situation in which she responded with positive reinforcement for a student who struggled in a social setting:

A student was having trouble working with partners and trouble with sharing. I came up with a plan and told the student to see if he could be a “helper” with his partner. See if he could help his partner with throwing the ball at the target, kind of like a “coach.” He seemed to like the idea, and every time I noticed him helping/coaching, then I would recognize that behavior sometimes individually and sometimes in front of the entire class. He continued with this plan and is now able to work well with partners.

In this situation, Mrs. S used positive reinforcement not to reward, but to correct an undesirable behavior. In the second example, Mrs. S positively reinforced good behaviors to persuade a disruptive student to follow suit; however, the student did not. Mrs. S described the event:

A student was having trouble following directions and lining up with his hands to himself. I gave several other students positive reinforcement of their good behavior by lining up with hands to themselves. I even quietly reminded this student to do the same thing, and he chose not to. He kept touching the students around him, and I had to remove him from the line. I spoke with him individually about “his challenge,” see if I can catch him next time lining up with his hands to himself. He appeared to listen and agree with the challenge. The next class I reminded him before lining up that I would be watching to catch him. First thing he did was push the student in front of him, so I started picking out other students who were lined up with hands to themselves to see if he would remember the challenge, but he continued to use his hands no matter which student was near him.

Although the use of positive reinforcement failed to entice the acting out student to listen, it, in fact, worked as intended on other students who were behaving. These two separate occasions resulted in Mrs. S's using positive reinforcement differently. First, she appointed the student who struggled, working with his peers as a coach. Second, she attempted to coax with positive reinforcement, then challenged him on a personal level. The first incident was a success, but in the second example, the acting out student was not interested in the reward for keeping his hands to himself.

Mr. D provided a different example in which he employed a different form of strategy to improve the motivation of a student who was not motivated to participate because of his lack of confidence in his own ability level. Mr. D discussed his ideal strategy to motivate students with positive reinforcement:

I had a student who did not want to play one day when we were starting soccer skills unit. He said he wasn't any good at soccer and didn't want to play. I then let him be my set up and clean up helper for the day and told him that I was not very good at soccer either that we could learn together. He was my partner that particular day, and by the end of class, he was letting me know how great I was doing.

Mr. D empowered the student by providing a choice to succeed in a different way during the lesson. The student had the opportunity to be the lead helper and work with the teacher as a partner. The direct result was a student who desired not to participate increased his engagement level through positive reinforcement.

Mrs. F noted how students could improve their ability and motivation levels based on the gratification of being positively reinforced. She explained:

Positive reinforcement is the major factor in students' motivation levels, especially in the Physical Education setting. When I give my students specific, positive praise, it is instant encouragement and motivation that makes them want to continue the skill and improve in the skill.

Mrs. F uses positive reinforcement as a reward to motivate the students to excel in PE. If a student succeeds at a specific task, Mrs. F will reinforce the student's achievement by providing praise. The student, in turn, will then continue to seek praise by striving to be successful.

**Using positive behavioral interventions and supports.** First and foremost, the teachers' utilization of positive reinforcement strategies is a staple of the Positive Behavioral Interventions and Supports (PBIS) system. Their use of different types of positive reinforcement is the foundation of a quality PBIS system. Most importantly, the teachers' support for a PBIS system provides a reflection of their program's success and the eagerness for their students to engage in class and participate in leisurely physical activity.

All three of the teachers expressed admiration for PBIS, mainly due to its use of positive reinforcement. When asked if PBIS should be implemented in all schools, all the teachers responded positively. Mrs. S explains, "Yes, some students have benefitted and become better behaved students. I have only seen this if the entire school is consistent with the PBIS program." Mr. D elaborated that it was an essential component for morale, "I do think that PBIS with the use of positive reinforcement should be implemented into every school because we all need positive comments in our lives." Mrs. F also mentioned the positive outcome for students using PBIS, "I believe PBIS should be implemented in every school. Having the ability to reward students for their positive behavior is a huge motivating factor for students." Clearly, teachers

not only should use PBIS, but schools should adopt the program as a school initiative, based on the experiences of these three teachers to improve motivation levels.

The three elaborated more on what they found to be the most obvious benefit of using PBIS. Above all, the teachers explained that it was their strategy to use reward to motivate the students. However, the PBIS system is not flawless, the teachers explained the role of a teacher is to be careful how the rewards are offered.

Mrs. S explained a noticeable benefit, “The students who were already behaving and following the school rules are now able to be recognized and hear positive things they are doing correctly.” This is important to note because the students who follow instructions are being noticed for their accomplishments. However, Mrs. S also offers a different perspective:

Yes, some of our students definitely want to know and see what they are going to get/win/receive if they follow the rules, instead of learning to behave for the right reasons. I feel that the program could be great, but there are still things that need to be fixed. The hardest part for the program to work is that you have to have all staff and school employees on the same page with the same understanding of expectations.

First, she reiterated that, as students are being rewarded, the potential for students to work toward a prize becomes more important than the learning objectives for the lesson. Second, the inconsistency of the school staff members’ implementation threatens the applicability of PBIS. Both can negatively influence the outcome of PBIS; however, these also indicate that the role of a teacher is to monitor the use of rewards and collaborate with colleagues to make certain the program is implemented correctly and consistently.

Mr. D also had one critical component that must be followed using the PBIS program. He believes the teachers must make certain to follow through with incentives offered, he said, “The

only downfall I see when offering incentives is if a child does not receive the incentive or incentives offered. If this happens I see a complete shut down and unwillingness to try from the student.” This comment aligns with Mrs. S’s belief that the system depends on support from all staff members. If staff members fail to provide the incentive earned, then the students’ behavior will not be reinforced.

Mrs. F did not have any discontent toward PBIS or the use of positive reinforcement. In fact, she commented on the prosperous outcome of rewarding students. She stated:

As a teacher, I love that I have the ability to reward students for their positive behavior. I believe incentives motivate students to show positive behavior because they see the connection of positive behavior with incentives. When I see a student praise another student, I give him a red ticket (incentive), and this reminds him that this is an important behavior in Physical Education.

Despite Mrs. F’s dissenting comments, compared to her colleagues, she sets a precedent by rewarding the students appropriately. As a result, the students are aware of the possibility of earning a token. More importantly, she follows through with providing incentives and is consistent with her management of practicing PBIS’s rewarding techniques.

A teacher’s influence in PE is a major determinate in how a child perceives PE and, considering teachers promote active lifestyles, teachers also empower students to engage in leisurely physical activity. The responsibility of a PE teacher is to make certain the students are provided with the best possible environment to engage in class that will lead students to a positive perception to PE and physical activity. The teachers’ journal entries identify the primary roles of a PE teacher who utilizes PBIS in their classroom. Based upon the teachers’ journal comments, it is possible to make the following assertions concerning the increase of students’

motivation in PE and physical activity using positive reinforcement: It is the role of the PE teacher to address bullying proactively to ensure the victim is not demotivated by the situation; he or she must use incentives as a means of positive reinforcement responsibly by ensuring the prizes are valued and given at the appropriate times; and finally, he or she must make certain that all teachers follow the PBIS program consistently to reinforce the more desirable behaviors.

### **Summary**

In Chapter Four, I presented the findings based on the data collection sources. The data was collected using student interviews, caregiver questionnaires, and teacher journals. For clarity purposes, the findings were analyzed and explained in three themes that materialized from the data collection sources. Within each theme, the data revealed sub-factors that emerged from the responses of the participants.

The first theme centered on the factors that significantly motivate participation in PE and leisurely physical activity. The student participants' interviews yielded several factors that were discussed within the theme. The factors that motivate students to participate in PE and engage in leisurely physical activity are: effective incentives; friends and family members who encourage leisurely physical activity; and the negative impact of bullying. The responses were analyzed and categorized accordingly to better represent the recurring theme.

The second theme's purpose was to identify the role of caregivers to motivate their children to engage in PE and leisurely physical activity. Embedded within the title theme are individual factors that the questionnaire identified, the caregivers' role is to organize and participate in leisurely physical activities as a family, to allow opportunities for their children to be physically active in the community and neighborhood, and to take an active role in their children's education. The caregivers provided evidence that indicated an active child is a

reflection of the caregivers' positive perspective of physical activity and the importance of being active regularly.

The third theme's purpose was identifying educators' strategies to increase students' motivation in PE and to be physically active, utilizing positive reinforcement. Although a major emphasis on positive reinforcement was a result of the use of the behavior management system known as PBIS, the teachers responded based on their teaching experiences. Their perceptions resulted in the theme meticulously discussed in the following sections: strategies to overcome bullying, using positive reinforcement to motivate students, and using Positive Reinforcement Interventions and Strategies (PBIS). The teachers indicated that these three factors play a role in the students' motivation; however, the students' motivation can be positively influenced using the appropriate strategies.

In summary, the factors that positively influence elementary school students to be physically active and engage in PE classes are based upon effective incentives; friends and family members who encourage leisurely physical activity; and the negative impact of bullying. In addition, the positive effect of caregivers influence the students through organizing leisurely physical activities as a family, providing opportunities for their children to be physically active in the community and neighborhood, and taking an active role in their children's education. Likewise, the teachers positively influence the students' physical activity by implementing strategies to overcome bullying, utilizing appropriate positive reinforcement, and using PBIS.

## **CHAPTER FIVE: DISCUSSION AND FINDINGS**

### **Overview**

The purpose of the qualitative collective case study was to identify the influential factors that motivate and demotivate third-grade students' desire to engage in PE and leisurely physical activity. This chapter is comprised of seven sections: (a) an overview, (b) a summary of the findings, (c) a discussion of the findings and the implications in light of the relevant literature and theory, (d) an implications section, (e) a limitations section, (f) recommendations for future research, and (g) a summary section. The benefits for elementary-aged students who are routinely physically active are vast. Among the countless benefits, the primary advantage of regular physical activity is the possibility of reducing the probability of being obese. In order to increase students' activity rates, motivation must be considered as a factor that determines an individual's desire to engage in physical activity. For most young people, the opportunity to be physically active during school is at physical education (PE) class. Additionally, it is during PE in which the student learns the value of being active, and the teacher educates the child of the necessity to embrace leisurely physical activity. As a result, it is imperative to identify the influential motivating factors that impact an elementary-aged student's desire to participate in PE and leisurely physical activity.

The study relied on three data collection sources to gather data in order to identify themes from the perspectives of the participants. The collection sources included student interviews, caregiver questionnaires, and teacher journal prompts. Each student represented a case; this required 18 student participants, 18 caregivers, and three teachers. Each school site enlisted the participation of three male and three female participants, six caregivers, and one teacher. The theoretical framework was comprised of Piaget's (1962) and Vygotsky's (1978) theories of

cognitive development through play and Deci and Ryan's (2008) Self-Determination Theory (SDT).

### **Summary of Findings**

Physical education is an essential course for students to promote the value of physical activity and most importantly, healthy living. Creating an environment that fosters physical activity requires a program that is empowering and void of demotivating characteristics. If programs fail to inspire, the students will likely espouse an apathetic mood: however, stimulating one's interest in PE would lead to more physically active children outside of class. Morgan, Beighle, and Pangrazi, (2007) found that students were more active after school when PE was provided on the same day. Young people must be positively motivated to pursue healthy lifestyles. This is only possible by creating a learning environment that applies the most productive factors associated with increasing an individual's desire to engage in PE. To encourage a more positive environment, many school systems have adopted positive behavior instruction and supports (PBIS). According to Hill and Flores (2014), PBIS has increased accountability and created a positive environment and a means for positive reinforcement to stimulate learning. Previous research has identified various factors that positively and negatively influence students' motivation to engage in PE. To identify the influential factors, targeting the experiences of third-grade students, their caregivers' perceptions of PE, and their teachers' experiences using PBIS were important to utilize.

The research study was designed to pinpoint the influential factors that motivate and demotivate students' desires to engage in PE and leisurely physical activity. In turn, PE teachers can create strategies to rid the learning environment of factors that decrease a students' motivation to embrace the content taught in class and make good use of the content at home. The

study focused on motivation levels and a child's leisurely play; as a result, the use of the Self-Determination Theory, and Vygotsky's and Piaget's theories of play provided the framework to create one primary question and three sub-questions to complete a qualitative collective case study.

A level of enjoyment, acquiring benefits, and social interaction with peers enhanced attitudes regarding active participation in physical activity (Chen & Guo, 2014). The current study yielded similar results, but expanded to include perspectives of students, caregivers, and teachers in a qualitative format. Including the perspectives of the stakeholders enabled the study to identify the additional factors that hamper a third-grader's desire to engage in PE and leisurely physical activity.

While investigating strategies to influence motor behaviors, Alstot (2012) researched the impact a token economy has exclusively in a PE environment. His study revealed that token economies have a positive place in PE to motivate the learner effectively.

The experiences and perceptions of the participants were closely associated with the questions asked during the data analysis process. After the analytical process, themes emerged, based on the similarity of the statements of students, caregivers, and teachers. Furthermore, the themes led to assertions as a means to provide a more detailed description of the data. The assertions included strategies to improve an elementary-aged student's experience in PE, the appropriate way to address bullying, how to promote leisurely physical activity at home, and instructional strategies for using positive reinforcement.

The identification of strategies was a result of multiple data collection sources, which yielded data triangulation. Student interviews, caregiver questionnaires, and teacher journal prompts were compiled to answer the primary question: What factors positively influence

elementary school students to be physically active and engage in PE classes? Each participant who completed a data collection method assisted in answering this question. Analyzing the assertions for each of the three sub-questions made it possible to identify the factors that positively influence the students to be leisurely physically active and engage in PE.

The first sub-question relied on the responses of the students: What factors do students identify as significantly influencing their motivation to be physically active? In a two-part interview, the students reported different factors that positively and negatively influenced their motivation to be physically active at home and to be engaged in PE at school. Based on their responses, students are positively motivated by incentives that are both intrinsically and extrinsically motivating; at home, the students who were physically active at home reported playing with friends regularly; and effective classroom management prevents bullying and other students' poor behaviors from negatively impacting their achievement levels in PE class.

The second sub-question utilized the responses of caregivers: What is the role of caregivers in their children's motivation to be physically active? The caregivers were given a short questionnaire that elicited their perspective of their child's leisurely activities and their thoughts about PE. The caregivers concluded that families must routinely be physically active together; caregivers must strive to get their children involved in recreational leagues within the community or take advantage of parks and afterschool programs; and finally, to better understand what takes place in PE, caregivers need to get involved in their children's education.

The third sub-question made use of the teachers' experiences with positive reinforcement strategies: How can educators influence students' motivation to be physically active through positive reinforcement? The teachers completed three different journal entries, the entry topics varied, but focused on bullying, positive reinforcement, and the use of PBIS as a management

strategy. The teachers revealed valuable perspectives regarding the three topics and yielded multiple strategies for the purpose of creating quality PE programs. First, a PE teacher must have a classroom management system in place to proactively address bullying. Second, he or she must use incentives to reinforce desirable behaviors at the appropriate times. Finally, there should be a consistent and reinforced PBIS model throughout the school.

To answer the primary question, the assertions were compiled to pinpoint all of the factors that influence leisurely physical activity and higher engagement levels in PE for third-grade students. Multiple participants revealed various factors that impact third-grade students' desires to participate in leisurely physical activity and to engage in PE. The data analysis revealed the following factors: (a) incentives play a role in motivation; (b) organized and leisurely physical activity fosters positive relationships among peers; (c) bullying negatively affects students' motivation; (d) leisurely family activities foster higher engagement levels in children; (e) access to parks, recreational facilities, and youth sports leagues play a role in leisurely physical activity levels; (f) caregivers' involvement in their child's education allows communication between teacher and caregiver to strengthen the PE program; (g) the effectiveness of the classroom management of the teacher ensures all students are provided with an education that is safe and fair; (h) the teacher's ability to use incentives appropriately increases the likelihood of the most desirable behaviors; and (i) consistent school-wide application of the PBIS model reinforces positive student outcomes.

### **Discussion**

Identifying the influential factors that motivate and demotivate third-grade elementary students to engage in PE and leisurely physical activity outside of class can be used to positively encourage young people to practice the ideologies of a quality PE program. The study yielded

factors that directly impact student motivation to participate in PE and extracurricular physical activity. Teachers and caregivers can make use of the identified factors by addressing the factors strategically in class and at home. In doing so, problems affiliated with a lack of physical activity and insufficient engagement in PE can be approached professionally: primarily, encouraging physical activity can potentially decrease childhood obesity rates. Additionally, the perspectives of teachers and students regarding the principles of using positive reinforcement in PE contributed to the list of factors. Theories associated with achievement and developmental growth through play provided the framework for the study, relating to the motivational factors in PE and physical activity involvement.

Deci and Ryan's Self-Determination Theory (1985) and Vygotsky's (1966) and Piaget's (1962) theories associated with development through play were used to better understand motivation and students' incentive for leisurely play. Developing a stronger understanding of the influential factors impacting a student's motivation to engage in PE and physical activity is imperative to improve PE environments. The students' desire to immerse themselves in PE and leisurely physical activity is entirely dependent on factors that positively influence the students.

Self-determination theory proposes that a student's personal interest and external motivation differ according to the child, behaviors are a result, based on autonomous versus controlled motivators (Gagné & Deci, 2005). This study considered this criterion of the Self-Determination theory to identify the influential factors that explore the motives of engagement in PE and leisurely physical activity. Bound to the theory of Self-Determination, the motivation of individuals plays a role in engagement levels. Deci and Ryan (2000) identified that the premises of Self-Determination are how individuals reflect on their choice-based actions. Motivation

within the classroom is important to understand, as it is often determined, based on various factors, including classroom management strategies.

Self-Determination played a role in the research, due to the use of PBIS. PBIS uses tokens to reward appropriate behaviors within the class. In turn, the class is provided with larger prizes to support their achievements. However, a conflict arose that may disagree with the foundation of Self-Determination Theory. According to the theory, self-regulation is delayed with the opportunity of earning rewards (Deci, Koestner, Ryan, 1999). The students, however, had prior knowledge of the importance of physical activity. The reward was only an added measure to further motivate students to engage in class and leisurely physical activity. Ultimately, the behavior of a child is dependent upon what he has learned. This prior knowledge is more of a motivation than the freedom of choice.

Vygotsky and Piaget are renowned psychologists whose theories have a strong influence in education and youth development. Their theories possess similarities and differences; both theories emphasize the positive effects of play in children. Under the study's conditions, play was defined as leisurely physical activity during the study.

First, Lev Vygotsky's (1978) theory proposed that play creates a zone of proximal development (ZPD), which results in learning's being influenced based on the content of the lessons and interactions with others. As a result, Vygotsky's theory relies on individuals to actively engage socially (Lisle, 2006). While at school, the students are challenged based on their own ability level, provided the teacher has established a unit that progressively challenges their ability to perform. As experienced professionals, the teachers provided guided practice and verbal and physical corrections appropriately. The point at which the student needs assistance from an adult to successfully complete a task is known as the ZPD. Embedded within the ZPD is

the factor that is consistent with the findings of the influential motivation study, which are social interactions with peers and/or a teacher.

Jean Piaget (1962) identified practice play, symbolic play, and games with rules as the three developmental stages during play. For the purpose of the study, the participants' positive perceptions of physical activity and PE are essential. Piaget expressed enjoyment as a key element in symbolic play; in accordance with this idea, the idea of enjoyment is a motive that drives an individual to engage; however, a child's level of enjoyment is stimulated by other influential factors identified in this study. On the contrary, Piaget theorizes that games with rules is the stage where cognitive development stops and intellectual and motivational sensory is satisfied because of the rules that guide the game. Again, the knowledge that exists in each child relating to skill and healthy living motivates the child to pursue higher goals. The rules that govern class games or a leisurely activity does not impede cognitive development; instead, it allows the student to use critical thinking skills and complex motor movements to be successful.

There is a growing number of young people who are considered to be obese, leading to epidemic proportions (Koukourikos et al., 2013). The study did not use statistical measurements to track the obesity rates of the participants nor the actual amount of time a student engaged in physical activity; instead, the study investigated what factors influence young people to be more physically active and engage in PE. Physical activity is believed to be the primary factor to decrease childhood obesity rates (Bambara et al., 2012). The direct impact on childhood obesity could not be proven in the parameters of this particular study, but the influential factors that persuade children to participate in physical activity and what drives them to engage in PE were identified.

While at home, active individuals rely on access to various components that promote and ignite higher activity levels in children. Mainly, the leisurely physical activity levels of young people were contingent upon the group activity levels of families, the access to parks and other free resources within the community, the opportunity to participate in a recreational league, and the caregiver's knowledge of the PE program. These findings reaffirm the claim that the environment that surrounds the home is a strong determinant in physical activity levels of the children who reside there (Durand et al., 2012). As a result, Datar et al.'s (2013) conclusion that a caregiver's perception has no direct impact on childhood obesity can be argued. Considering the positive impact physical activity has on childhood obesity rates, based on the data, it can be argued that a caregiver's perception of childhood obesity potentially does have an effect on the growing problem, specifically, if the caregiver plans family physical activities, takes advantage of the parks in the area, and enrolls his child into recreational leagues. For example, a caregiver explained, "We try and walk at least 3 days a week. We walk around the block where we live. We get together with family and friends and walk the trail or play in the park." This would be indicative of a person who is knowledgeable of the positive outcomes that are derivatives of physical activity. This further supports the notion that access to community amenities affords citizens the opportunity to be physically active (Tappe et al., 2013).

While at school, the learner is expected to participate in PE in order to be properly educated on the elements associated with healthy living. Echoing the findings of Cowell (1949), the motivation levels of children play a decisive role in their willingness to partake in class. However, factors associated with intrinsic and extrinsic motivation have a strong correlation with participation (Deci & Ryan, 1985). The data reaffirmed that there are particular factors that act as motives in a student's desire to engage in PE and leisurely physical activity. It was unclear how

the activity levels compared to one another, but the students who had positive experiences with PE revealed favorable levels of physical activity. As previously researched, a higher engagement in PE class correlates with higher levels of physical activity at home (Morgan et al., 2007). The primary factors that originated from the data to ensure students indeed do engage in class are how a teacher utilizes particular incentives to motivate as a reward, the effectiveness of the teacher's classroom management system, and the consistency of using a school-wide token economy. In summary, these factors have the potential to produce a PE environment that alleviates bullying and poor motivation levels, and rewards accordingly without compromising a student's motive to be physically active for basic psychological needs.

Although the consistency of the implementation of the programs across the three schools was not determined, the PE teachers used PBIS as a management system to motivate students within the class. The effectiveness of the program known as PBIS was not the sole focus of the study; instead, PBIS was only a commonality among the schools. Therefore, positive reinforcement can be considered a determinate in a child's motive to engage in class. PBIS reinforces the most desirable behaviors of students by using rewards and tokens to support accomplishments in class. Based on the comments of the student participants, Alstot's (2012) work investigating the use of rewards in PE can be confirmed. Whereas Alstot's work concentrated on peer reinforcement, the underlying message is that rewards have a place in PE. Tokens were rewarded after class and between transitions, creating a feeling of accomplishment and success among the students. Student participants reiterated the excitement of earning incentives while in class. One student stated, "The PE teacher will give us a fun day if we earn enough tokens. It makes us want to work hard. We can get lots of equipment to play with on fun days." Numerous comments were consistent with this particular student's observation. The

reward imposed a goal and expectation among the students, and the students strived to earn this by abiding by the rules that managed the class.

The study's results identified numerous influences associated with youth PE engagement and leisurely physical activity participation. In fact, these factors necessitate the participation of students, teachers, and caregivers. Every stakeholder has a responsibility that, if observed, is possible for elementary students to increase physical education engagement levels and leisurely physical activity levels. To summarize, the factors that arose from the study are (a) incentives play a role in motivation; (b) organized and leisurely physical activity foster positive relationships among peers; (c) bullying negatively affects students' motivation; (d) leisurely family activities foster higher engagement levels in children; (e) access to parks, recreational facilities, and youth sports leagues play a role in leisurely physical activity levels; (f) caregivers' involvement in their child's education allows communication between teacher and caregiver to strengthen the PE program; (g) the effectiveness of the classroom management of the teacher ensures all students are provided with an education that is safe and fair; (h) the teacher's ability to use incentives appropriately increases the likelihood of the most desirable behaviors; and (i) consistent school-wide application of the PBIS model reinforces positive student outcomes. PE teachers must take into consideration the discovery of the factors when designing and applying a curriculum in order to eliminate any barriers that may hamper the motivation of students.

### **Implications**

The collective case study produced findings that can be put into practice as strategies to construct a PE program of distinction that successfully engages students, involves parents, and aids teachers in pursuit of healthy living. Additionally, caregivers can take advantage of the popular tactics identified by other caregivers to generate heightened levels of leisurely physical

activity in children. Implications derived from the findings and discovered factors from the perspectives of students, caregivers, and teachers that have ramifications on the engagement levels of students in PE and their physical activity levels outside of school. This study evokes the notion that all stakeholders—students, caregivers, and teachers—play a role in supporting and expressing appreciation for PE and physical activity.

### **Implication One**

First, the study revealed that PE teachers must have a classroom behavior management system in place that is practical, fair, and consistent. All teachers have their own strategies to address inappropriate behavior in an effort to refocus a student's attention in class; however, there is often a lack of consistency among teachers within the same building. In a typical elementary school week, students are exposed to a regular classroom teacher, music teacher, art teacher, and PE teacher. All of these teachers have dissimilar teaching styles and behavior plans. As a result, a school-wide behavior plan is vital.

PBIS is a behavior management system that relies on a matrix to improve and sustain appropriate student behavior. The three schools utilized the program as a way to bring consistency across the board; however, the teachers expressed the need for all teachers to be made aware of how to implement the PBIS matrix into their class. Often, inexperienced teachers are provided only with a brief introduction from fellow teachers about the behavior management system, resulting in disparities throughout the school.

A lack of sufficient teacher training and inconsistent implementation of the program within the school has a counterproductive effect on the behavior and motivation levels of students. Providing more training sessions to the staff will yield higher efficiency rates of PBIS. Understanding how to manipulate the system will guarantee that the students are provided with

incentives when necessary to reinforce desirable behaviors, promote students to engage in specific content areas, and alleviate the harmful side effects associated with bullying. Teachers who lack the understanding of PBIS will fail to address the preceding factors identified as determinants of engaging in PE and leisurely physical activity.

### **Implication Two**

A second implication that arose from the study is that caregivers must provide their children with the opportunity to be physically active through a plethora of alternatives. Children must be provided with a variety of opportunities to be physically active to ensure the activity adheres to their personal preferences. Additionally, there are common elements that the study found to correspond with leisurely physical activity engagement; however, there are situations that may prevent the presence of these elements.

Children are active at home when the opportunity to play in the neighborhood with friends arises. Young people can interact with peers and establish lasting friendships that can increase their willingness to engage in physical activity. In the event friendships cannot be established within the neighborhood, then a caregiver must take advantage of the resources available within the community. Parks, recreation leagues, and fitness centers are readily available to people in population dense areas. Parks are free of cost and offer children opportunities to build overall fitness levels, playground equipment supports muscular strength, cardiovascular endurance, and flexibility. Additionally, children also have the chance to interact with peers and establish new friendships while taking advantage of the community's free resource. Caregivers, who are capable of paying for recreational services, can enroll their children into recreation leagues and fitness centers that can adhere to most children's

preferences. Accessibility to these resources is important to engage individuals in leisurely physical activity.

### **Implication Three**

A third implication is that teachers must strive to increase leisurely physical activity levels of their students by offering afterschool programs. The PE teacher must strive to embody the principles of healthy living by participating in regular physical activity. The PE teacher can be a positive role model by offering extracurricular clubs whose mission is to guide students in the pursuit of achieving personal fitness goals.

Based on the opinions of the student participants at Lauder, the students praised the running club that was offered. Additionally, the students had the opportunity to earn a reward for their efforts and used leisure time to reach their mileage goal. Most importantly, the students get to observe their PE teacher engaged in physical activity in support of the content he or she teaches. Furthermore, teachers must take their students' financial situations into consideration by offering free programs which induce adolescent physical activity.

### **Implication Four**

A final implication that derived from the study is that teachers and caregivers must work conscientiously to collaborate with one another to improve the PE experience for elementary-aged students. Because the teacher and caregiver have an obligation to work together, communication is a key component of a thriving PE program. By joining forces, the teacher can advocate for stronger practices, and the caregiver can assist by offering insight based on their child's interests and their own concerns.

Effective communication is crucial in order to create an environment that establishes a PE program that is meaningful for all learners. Also, a teacher who is accessible and

approachable can develop relationships with caregivers to ensure the student is provided with a quality learning experience. Working together to institute a cooperative environment will give the teacher and caregiver a stake in the student's academic experience.

### **Limitations**

The collective case study involved analyzing the responses of students, using student interviews, caregiver questionnaires, and teacher journal prompts. Although these multiple data collection sources achieved triangulation, the participants are localized to a small town and cannot be generalized to a larger population or different regions. Additionally, the student participants were supposed to come from the same class to ensure each student is exposed to the same PE lessons. However, the number of students who are enrolled in the third grade at the schools made this unattainable. At Gorge Elementary, the enrollment was the lowest it has been in years. Each third-grade class only had 12 students on the class roster, only four girls in each class. Each student was identified as an individual case; however, the data was presented based on the themes that derived from a cross-case analysis. In the introduction of the material, the data focused more on the recurring factors identified as a whole and less as individual cases.

The questionnaires and teacher journal prompts were completed and written with clear answers. Some caregivers provided more detailed answers than others, but their responses were easily understood. This also held true regarding the teacher journal prompts, each teacher provided a circumstantial response for each prompt. The original response time allotted for the teachers was a week, but for unforeseen circumstances, an extension was given to ensure the teachers provided detailed responses. Although the student interviews went well, some of the students seemed to suppress their feelings and not answer freely. The age of the student should also be considered a possible limitation: some of the students experienced symptoms that would

reflect a social anxiety issue. During the interviews, the physical symptoms included dryness of throat, sweating, voice trembling, blushing, and variable voice projections, which are the same symptoms of a young person who experiences social anxiety (Inam, Mahjabeen, & Abiodullah, 2012). Finally, the data is completely subjective and can be delineated conversely from researcher to researcher.

### **Recommendations for Future Research**

The study focused on the factors that positively influence third-grade elementary school students to be physically active and engage in PE classes. The study used student interviews, caregiver questionnaires, and teacher journals to identify the most prevailing factors. The study aimed to identify factors that can ultimately increase leisurely physical activity levels and motivate third-grade students to engage at a higher level in PE. The data was used to add to the little research that exists relating to the primary focus of the study. In order to continue contributing valuable research to improve a child's physical activity level and motivation in PE, the need for further research is important.

First, a research study needs to investigate the positive factors that motivate individuals to be physically active and engage in PE as they progress through middle and high school. The current study only enlists the experiences of third-grade students; however, as students grow older, the need for daily physical activity becomes even more critical. First and foremost, the need to create a quality PE program is of vital importance to increase the probability that students will enjoy PE. In order to accomplish this task, the main objective is to make certain a student is comfortable with the content being taught. This involves targeting a child's sentiment toward curriculum focus; a child's attitude toward physical activity is positively impacted by a contextually sound PE program (Liu, Wang, & Xu, 2008). Additionally, it has been proven that

PE makes a significant contribution to regular physical activity engagement (Fairclough & Stratton, 2004). If true, a future study investigating the academic interests of middle and high school students can prospectively make PE worthwhile for all students. By identifying the students' specific likes and dislikes, the teachers can better prepare for the students who withdraw from PE by teaching content that will improve their overall attitude; and in turn, strategies to ameliorate students' perceptions of PE will be achievable.

Second, a comprehensive study needs to be conducted to better understand the socioeconomic impact on school-aged individuals' opportunity to be physically active at home. Additionally, what physical activities as a family lead young people to engage in leisurely activities is essential. The opinions of the caregivers at the Title-1 schools suggested that the students with positive experiences with PE and physical activity had families who were active together. The study, however, did not distinguish the individual activities that played a role in their families' active lifestyles. In a previous study, Raudsepp (2006) found that parents guide their children to embrace physical activity through support, and the economic status of the families had little impact on the physical activity levels of individuals. If this is true, then it is imperative to identify the activities which bring families together. By better understanding the leisurely physical activity options available to families from various economic backgrounds, it would then be possible to offer recommendations to parents who want to get their family active. Although the study was conducted at Title-1 schools with the caregivers' input, the socioeconomic status of the caregiver was never questioned.

Finally, a future study needs to investigate the specific incentives awarded to students in PE to better understand the impact of prizes on a young person's motivation. Essentially, the question that needs to be asked is this: What effect do specific incentives have on an individual's

internal and external motivation to be physically active? By identifying the most valued forms of rewards, it would be possible to offer the rewards that yield the most promising outcomes.

### **Summary**

The primary goal of the collective case study was to identify the influential factors of third students at three elementary schools in North Carolina that use PBIS to deploy positive reinforcement to motivate third grade students to engage in PE and leisurely physical activity. Utilizing the opinions of students, caregivers, and teachers in the study was important because the positive and negative factors identified can be used to improve PE environments and to promote leisurely physical activity for elementary-aged individuals. Ultimately, the results benefit all stakeholders. Findings allowed themes to be constructed and assertions made based the experiences of students, caregivers, and teachers regarding the influential factors associated with youth physical activity engagement and PE participation. Teachers will be able to use the data to better understand the positive attributes students experience and the factors they face that discourage their level of engagement in class. Additionally, the teachers can gain a stronger understanding of the leisurely physical activity levels of young people and how caregivers value PE and physical activity. Caregivers also can benefit from the results: the study yielded data that can be used by the caregiver to increase their child's overall physical activity levels. The study identified the prominent characteristics that correspond with young people who immerse themselves in recreational physical activity. Acknowledging these factors is important to guide young people to embrace a physically fit lifestyle. The anticipated impact is a reduction in childhood obesity and an influx of students who desire to engage in PE and participate in regular, leisurely physical activities.

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## APPENDIX A: LIKERT SCALE

### Likert Scale

Name (Pseudonym) \_\_\_\_\_

	Strongly Disagree 1	Disagree 2	Agree 3	Strongly Agree 4
I like physical education	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I believe physical education is an important class	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I enjoy the games I play in physical education	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I believe physical activity is important	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am physically active for at least 45 minutes everyday	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
When I am at home, I go outside to play	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I enjoy having the opportunity to play physical active games with my friends	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

## APPENDIX B: INDIVIDUAL CASE WORKSHEET

Case ID: Dolly (Lauder)	
<p>Synopsis of case:</p> <p>Loves the idea of earning a reward, enjoys running, understands that hard work pays off. Most importantly, she identifies the value of physical activity in pursuing a healthy life.</p>	<p>Case Findings:</p> <p>I. Positive Reinforcement</p> <p>II. Caregiver Takes Part in Education</p> <p>III. Takes Advantage of Resources</p>
<p>Uniqueness of case situation for program/phenomenon:</p> <p>Correlates engagement in PE and physical activity with rewards that can be earned in class. Additionally, she understands bullying is demotivating, but admits that she has been mean to her peers in class.</p>	<p>IV. Bullying (negative)</p>
<p>Relevance of case for cross-case Themes:</p> <p>Theme 1 <u>Bullying, Friendship, &amp; Incentives</u></p> <p>Theme 2 <u>Active within the Community</u></p> <p>Theme 3 <u>Check Worksheet Marked Ms. F</u></p>	<p>Possible excerpts for cross-case report:</p> <p>Dolly is a prime example of the positive outcomes of using incentives to motivate desirable behaviors. Additionally, she understands the value of maintaining a healthy lifestyle.</p>
<p>Factors (optional):</p> <p>Dolly participates in the Mile Club; as a result, she is active at home and recess to increase her mileage.</p>	
<p>Commentary:</p> <p>“Last week, I received the PE award for being the best kid in the class. It made me feel great: I thought to myself that hard work pays off and running the 12 miles was worth it. I run every night: I really like running, and it was a big deal. I want to go back to PE every day and be physically active. Earning a reward makes it even better to love PE and running.”</p> <p>“Well, I can say I was mean to someone. I think one time when Aiden said something mean to me, but I usually have good days in PE. It made me feel bad</p>	

about being mean. My friend hurt my feelings, and then I was mean to someone else. It all hurt my feelings and ruined my time in PE. I just wanted to leave.”

Caregiver: “Dolly enjoys physical activity. I believe this is due to her physical education teacher, Coach F. She is a member of the running club and ran a 5K last year.”

Caregiver: “The running club and the 100 Mile Club have been excellent stimulators for Dolly. I credit this to Mrs. F.”

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Case ID Katy (Lauder)	
Synopsis of case:  Family is extremely active and Katy has received athlete of the month to recognize her efforts.	Case Findings: I. Positive Reinforcement  II. Organized Family Activities  III. Caregiver Takes Part in Education
Uniqueness of case situation for program/phenomenon:  Planned family activities motivates Katy to pursue an active lifestyle	IV.
Relevance of case for cross-case Themes: Theme 1 <u>Incentives</u> Theme 2 <u>Communicates with PE teacher, Planned Family activities</u> Theme 3 <u>Check Worksheet Marked Ms. F</u>	Possible excerpts for cross-case report:  She already has earned an outstanding achievement from positive reinforcement. This contributes to an increased level of physical activity engagement and PE participation. Her family also is active together and she is motivated by the participation of her family while at home.

Commentary:

“When I got athlete of the month, I felt amazing. I really enjoy PE and physical activity.”

Caregiver: “I am physically active every day, whether it is doing yoga in the living room or walking to the store. If it is a pretty day out and we need to go ½ mile to the store to buy a drink, I will get Katy to walk and it excites her.”

Caregiver: “We do take Katy to the park. We like to walk on the walking trails that are available. We also have visited the YMCA, but we are not a member: it is a bit pricey.”

Caregiver: “Making PE fun instead of seeming like work helps out.”

Caregiver: “I think the 100 Mile club is a good thing Mrs. F does to encourage Katy to want to run or walk. She also participates in the running club in the spring.”

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Case ID Staff (Lauder)	
Synopsis of case:  Caregiver wants teacher to communicate the importance of physical activity. Additionally, the opportunity to earn a t-shirt motivates Staff to be physically active.	Case Findings: I. Positive Reinforcement  II. Takes Advantage of Community Resources  III.
Uniqueness of case situation for program/phenomenon:  The family noted how the family attended the park on a regular basis.	IV.
Relevance of case for cross-case Themes: Theme 1 <u>Incentives</u> Theme 2 <u>Active as a family, Parks, communicate with PE teacher</u> Theme 3 <u>Check Worksheet Marked Ms. F</u>	Possible excerpts for cross-case report:  Earning a t-shirt motivates Staff in his efforts to obtain more miles. As a result, his physical activity levels increase.

<p>Commentary:</p> <p>“I was given a 100 mile t-shirt and a certificate for the athlete of the month. I felt awesome for getting it, and it moved me to work harder.”</p> <p>Caregiver: “Staff plays soccer twice a year, fall and spring. We go to the park all the time. Staff also goes to the YMCA five days a week for afterschool care.”</p> <p>Caregiver: “Help Staff see that physical activity can be fun.”</p>
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Case ID: Sally (Lauder)	
<p>Synopsis of case:</p> <p>Much of her leisurely physical activity was a result of the organized family activities. Taking advantage of the community resources, what the school had to offer, and spending time with friends promoted higher physical activity levels.</p>	<p>Case Findings:</p> <p>I. Friendship</p> <p>II. Organized Family Activities</p> <p>III. Allow Opportunities for Children to be Active</p> <p>IV.</p>
<p>Uniqueness of case situation for program/phenomenon:</p> <p>The family is active together and attends the park to play. Also, the caregiver praised the school for offering activities throughout the year.</p>	
<p>Relevance of case for cross-case Themes:</p> <p>Theme 1 <u>Active with peer</u></p> <p>Theme 2 <u>Active as a family, School Communicates with caregiver, Attends Park</u></p> <p>Theme 3 <u>Check Worksheet Marked Ms. F</u></p>	<p>Possible excerpts for cross-case report:</p> <p>Positive about school-wide activities that is offered to the students</p>
<p>Commentary:</p> <p>“No, not yet. I do push-ups and sit-ups inside and when my god-brother comes over.”</p> <p>Caregiver: “We try and walk at least 3 days a week. We walk around the block where we live. We get together with family and friends and walk the trail or play in the park.”</p>	

Caregiver: “Our school is always encouraging our kids with different activities throughout the year.”

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Case ID Zombie (Lauder)	
<p>Synopsis of case:</p> <p>Zombie may not understand the purpose of the awards offered in class. Additionally, the caregiver noted a financial situation that prevents paying for recreational leagues or fitness centers.</p>	<p>Case Findings:</p> <p>I. Positive Reinforcement</p> <p>II. Allow Opportunities for Children to be Active</p> <p>III. Take an Active Role in Education</p> <p>IV.</p>
<p>Uniqueness of case situation for program/phenomenon:</p> <p>The only student that did not believe incentives played a role PE engagement. Instead, he thought the opportunity to earn a ticket improved physical activity levels</p>	
<p>Relevance of case for cross-case Themes:</p> <p>Theme 1 <u>Incentive Perspective</u></p> <p>Theme 2 <u>Work and Financial Hardship, Communicate</u></p> <p>Theme 3 <u>Check Worksheet Marked Ms. F</u></p>	<p>Possible excerpts for cross-case report:</p> <p>Concentrate on the socio-economic background that may prevent opportunities to participate in recreational leagues and enroll at health clubs.</p>
<p>Commentary:</p> <p>“Earning a reward does not make me want to go to PE, but earning a ticket makes me want to be physically active.”</p> <p>Caregiver: “We do not have the money for recreation leagues right now. And I work 12 hour shifts.”</p> <p>Caregiver: “teaching him the games at school, so he can play at home.”</p>	

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Case ID: Rio (Lauder)	
Synopsis of case:  Based on my observations, Rio is extremely athletic and engages at a high level. He and his caregiver identified fun a motivating factor in PE.	Case Findings: I. Friendship  II. Active Role in Education  III.  IV.
Uniqueness of case situation for program/phenomenon:  Identifies fun as the key to engaging Rio in class.	
Relevance of case for cross-case Themes: Theme 1 <u>Plays with friends</u> Theme 2 <u>Wants to have fun</u> Theme 3 <u>Check Worksheet Marked Ms. F</u>	Possible excerpts for cross-case report:  The caregiver believes that PE should be fun to get students actively involved. This is important because entertainment seems to be a motivating factor for students in class. Additionally, Rio seems to be more engaged while at home with his friends than he is at school in PE.
Commentary:  “I don’t always like playing games in class; but, when I get home, I will play football, basketball, and tennis with my friends. I like PE, but I like playing with my friends and talking.”  Caregiver: “As long as he is having fun, he has no problems.”	

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Case ID: Julia (Field)	
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<p>Synopsis of case:</p> <p>Julia referred to a time in a previous year in which she was bullied. The significance is that she did not want to leave the class but her feelings were hurt. It is unclear why she can manage her feelings better than others in her the third grade.</p>	<p>Case Findings:</p> <p>I. Bullying</p> <p>II.</p> <p>III.</p>
<p>Uniqueness of case situation for program/phenomenon:</p> <p>Bullying did not make her desire to leave the class.</p>	<p>IV.</p>
<p>Relevance of case for cross-case Themes:</p> <p>Theme 1 <u>Bullying</u></p> <p>Theme 2 <u>(Low Relevance)</u></p> <p>Theme 3 <u>Check Worksheet Marked Mr. D</u></p>	<p>Possible excerpts for cross-case report:</p> <p>Discuss how the feelings of those impacted from bullying could potentially be harmful.</p>
<p>Commentary:</p> <p>“There was this guy in my class last year, and he was mean to the entire class. He would say “shut-up” to the entire class because kids can be noisy sometimes, normally in gym. It didn’t make me want to leave PE, but it made me feel bad.”</p>	

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<p>Case ID Lucy (Field)</p>	
<p>Synopsis of case:</p> <p>Lucy was active with friends while at home. Additionally, her caregiver noted the role of the PE teacher to be important.</p>	<p>Case Findings:</p> <p>I. Friendship</p> <p>II. Active Role in Education</p> <p>III.</p>
<p>Uniqueness of case situation for program/phenomenon:</p> <p>Caregiver identified that the PE teacher has the responsibility to influence physical activity based on what they teach.</p>	<p>IV.</p>
<p>Relevance of case for cross-case Themes:</p> <p>Theme 1 <u>Friendship</u></p> <p>Theme 2 <u>Communicate with PE Teacher</u></p> <p>Theme 3 <u>Check Worksheet Marked Mr. D</u></p>	<p>Possible excerpts for cross-case report:</p> <p>The PE teacher has to be the</p>

	influential factor to persuade young people to be physically active.
<p>Commentary:  “Most of the time, I go to my friend’s house and play in the tree house. We also like playing tag and hide-go-seek.”</p> <p>Caregiver: “Find a fun activity. Help the student find a sport that they can enjoy. Also choose an activity that is developmentally appropriate.”</p>	

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Case ID Sarah (Field)	
<p>Synopsis of case:</p> <p>Sarah’s caregiver praises the running club that is offered at the school. This is a motivating factor for Sarah to engage in PE and leisurely physical activity.</p>	<p>Case Findings:</p> <p>I. Positive Reinforcement</p> <p>II. Allow Opportunities for Children to be Active</p> <p>III.</p> <p>IV.</p>
<p>Uniqueness of case situation for program/phenomenon:</p> <p>Praises the use of a club.</p>	
<p>Relevance of case for cross-case Themes:</p> <p>Theme 1 <u>Incentive Driven</u></p> <p>Theme 2 <u>Club Participation</u></p> <p>Theme 3 <u>Check Worksheet Marked Mr. D</u></p>	<p>Possible excerpts for cross-case report:</p> <p>Sarah and her caregiver identify the running club as a motivational tool to increase leisurely physical activity.</p>
<p>Commentary:</p> <p>“Yes, I kind of want to go outside and run around.”  (Response to incentive)</p> <p>Caregiver: “I liked the running club from last year. Sarah enjoyed that club.”</p>	

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Case ID Shine (Field)	
<p>Synopsis of case:</p> <p>The caregiver's work schedule interfered with the opportunity to be physically active together. The family is not active together and would like the PE teacher to introduce new activities to the students in class.</p>	<p>Case Findings:</p> <p>I. Bullying</p> <p>II. Allow Opportunities to be Active</p> <p>III. Take an Active Role in Education</p>
<p>Uniqueness of case situation for program/phenomenon:</p> <p>Caregiver did not use the park often. He or she also did not participate in physical activity because of work schedule.</p>	<p>IV.</p>
<p>Relevance of case for cross-case Themes:</p> <p>Theme 1 <u>Bullying</u></p> <p>Theme 2 <u>Not Active as a Family, Wants More Sports Taught in Class</u></p> <p>Theme 3 <u>Check Worksheet Marked Mr. D</u></p>	<p>Possible excerpts for cross-case report:</p> <p>The family is not active together, but the student understands the necessity of being physically active. The caregiver believes the PE teacher could teach various sports to align the class with the likes of the students. Plus, a quality behavior management system can reduce the negative behaviors within the class.</p>
<p>Commentary:</p> <p>“I think physical activity is important, because, if we don't participate, our arms will be like jelly.”</p> <p>“There was a time when we were walking around the gym, and we got so loud and were running; we got into trouble. Mr. D didn't want us to run, and some of the students started running. I wasn't running, and we still had to walk extra minutes because of the other students. It wasn't fun, and I wish I wasn't there. There was also this one time we were playing a game, and I was thinking how to move, then someone started being mean to me. They started yelling at me, and it made me really mad. I didn't have a good time at PE.”</p> <p>Caregiver: “We are not very physically active for the reason that we work all of the time. He plays outside in the yard, after a while his legs begin to</p>	

hurt. We mostly take him to the park, but not often.”

Caregiver: We really do not know how the school could encourage physical activity, because he does not like to play sports. He just likes to stay in and watch TV. Our suggestion is for the school to encourage him to liking some sport.

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Case ID Silver (Field)	
<p>Synopsis of case:</p> <p>Silver’s negative experience results in a negative attitude that demotivates his desire to engage in PE. (Bullying)</p>	<p>Case Findings:</p> <p>I. Bullying</p> <p>II. Communicate with PE teacher</p> <p>III.</p> <p>IV.</p>
<p>Uniqueness of case situation for program/phenomenon:</p> <p>Student had a negative experience with PE because of a bad experience. He desires to withdraw from class when peers are mean to him. Additionally, his caregiver identified the importance of teaching health benefits of physical activity.</p>	
<p>Relevance of case for cross-case Themes:</p> <p>Theme 1 <u>Bullying</u></p> <p>Theme 2 <u>Communicate</u></p> <p>Theme 3 <u>Check Worksheet Marked Mr. D</u></p>	<p>Possible excerpts for cross-case report:</p> <p>Communicate with the PE teacher to improve the environment for the student. It is also important to acknowledge the harmful impact bullying has on a student’s experience.</p>
<p>Commentary:</p> <p>“People would come up to me and be mean and tell say, ‘I don’t like you.’ It made me want to leave and sit out.”</p> <p>Caregiver: “Go more into the culture of exercising, i.e., make you strong, keeps you healthy.”</p>	

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Case ID Teddy (Field)	
Synopsis of case:  Teddy understood that good behavior yielded positive outcomes. He viewed the use of rewards as a motivating factor in his education experience.	Case Findings: I. Positive Reinforcement  II.  III.
Uniqueness of case situation for program/phenomenon:  Aware of the incentive of following the rules	IV.
Relevance of case for cross-case Themes: Theme 1 <u>Awards</u> Theme 2 <u>(Low Relevance)</u> Theme 3 <u>Check Worksheet Marked Mr. D</u>	Possible excerpts for cross-case report:  Tis motivated by awards and believes he will be more active in attempt to earn a prize.
Commentary:  “When we do terrific kids, I only got one PE award. It was for what I was supposed to be doing in class. It made me feel happy, because it was my first award ever at Field Elementary. I was listening and following directions and earned the award because of it. I believe the awards are good because it makes me want to come to PE. Plus, I probably would be more physically active because an award is very hard to get, and you have to do what you are supposed to do to get it.”	

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Case ID Bella (Gorge)	
Synopsis of case:  Bella did not believe that rewards had any impact on her decision to be physically active.	Case Findings: I. Positive Reinforcement  II.  III.

Uniqueness of case situation for program/phenomenon:  One of the few participants that did not believe	IV.
Relevance of case for cross-case Themes: Theme 1 Incentives do not work Theme 2 (Low Relevance) Theme 3 _____	Possible excerpts for cross-case report:  A negative component of using rewards in the class
Commentary:  “I don’t think it makes me more physically active.”	

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Case ID Elsa (Gorge)	
Synopsis of case:  Elsa believed that a healthy person would not be bullied. Elsa’s caregiver noted that PE should be fun.	Case Findings: I. Bullying  II. Communicate with your PE Teacher  III.
Uniqueness of case situation for program/phenomenon:  By Exercising, the other students cannot make fun of you	IV.
Relevance of case for cross-case Themes: Theme 1 <u>Exercise Prevents Bullying</u> Theme 2 <u>Communicate with the PE teacher about the interests of your child</u> Theme 3 <u>Check Worksheet Marked Ms. S</u>	Possible excerpts for cross-case report:  Exercise as a preventive measure against bullying  PE as a form of entertainment
Commentary:  “If you want to be healthy, you have to exercise more, and people will not make fun of you and call you weak.”  Caregiver: “Just make it fun.”	

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Case ID Kate (Gorge)	
<p>Synopsis of case:</p> <p>Kate earned a token and experienced a positive feeling. It is unclear if it motivated her to be active in class, but it did provide a favorable experience in class.</p>	<p>Case Findings:</p> <p>I. Positive Reinforcement</p> <p>II. Friendship</p> <p>III.</p> <p>IV.</p>
<p>Uniqueness of case situation for program/phenomenon:</p> <p>Reinforcement encouraged him to follow directions in class.</p>	
<p>Relevance of case for cross-case Themes:</p> <p>Theme 1 <u>Incentives, Friendship</u></p> <p>Theme 2 <u>(Low Relevance)</u></p> <p>Theme 3 <u>Check Worksheet Marked Ms. S</u></p>	<p>Possible excerpts for cross-case report:</p> <p>Identified that she was given a token for showing acceptable behavior. The use of positive reinforcement supported good behavior and she recognized the fact. Additionally, she identified leisurely physical activity with a friend as a common factor.</p>
<p>Commentary:</p> <p>“When you do good, Mrs. S gives you stuff. One time I was the quiet one, and she gave me a token. It made me feel great and made me wish we had PE twice a week.”</p> <p>“You can ask my friend--I ride my bike all of the time, and I don't want to get off. I go down to my friend's house, and I ride it around her circle.”</p>	

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Case ID Messi (Gorge)	
Synopsis of case:  Messi is motivated by the opportunity to earn a token while in class. Additionally, the caregiver promotes organized family physical activities.	Case Findings: I. Positive Reinforcement  II. Organized Family Activities  III.
Uniqueness of case situation for program/phenomenon:  Keeps track of his tokens as he earns them in class.	IV.
Relevance of case for cross-case Themes: Theme 1 <u>Incentives</u> Theme 2 <u>Participates in Activities as a Family</u> Theme 3 <u>Check Worksheet Marked Ms. S</u>	Possible excerpts for cross-case report:  His family is active; as a result, he is likely to be motivated to be physically active on a regular basis.
<p>Commentary: “Sometimes, I get a prize with the tokens I have collected. I have five now: I want to get a temporary tattoo with them.”</p> <p>“The PE teacher will give us a fun day if we earn enough tokens. It makes us want to work hard. We can get lots of equipment to play with on fun days.”</p> <p>Caregiver: “We, as a family, always play badminton outside. We play together, so that makes him want to do the same.”</p>	

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Case ID Sam (Gorge)	
Synopsis of case:  Sam has never received a prize; however, his class has earned a free day. He mentioned how it made him happy. Additionally, he talked about how he played with his friends in after school care.	Case Findings: I. Positive Reinforcement  II. Using Resources in the Community  III. Friendship
Uniqueness of case situation for program/phenomenon:	IV.

Afterschool programs increasing leisurely physical activity. However, he identified he did not have any friends at home.	
Relevance of case for cross-case Themes: Theme 1 <u>Played with Friends, Enjoyed Earning a Ticket</u> Theme 2 (Low Relevance) Theme 3 <u>Check Worksheet Marked Ms. S</u>	Possible excerpts for cross-case report:  Classroom management clarity
Commentary: “I have never received a prize: Mrs. S does not do that stuff. She gave us a token and got a fun day on the scooters. It made me happy because we earned it.”  “I play ball with my friends in afterschool care. We play tag, football, basketball, and this other kind of stuff. I do not have any friends at home, but I play in afterschool care with them. I ride bikes with my brother and sisters after I finish my homework.”	

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Case ID Nemar (Gorge)	
Synopsis of case:  He is motivated to be active by incentives that are offered in class. Additionally, the caregiver wants more afterschool programs offered for the students.	Case Findings: I. Positive Reinforcement  II. Taking Part in Education  III. Using Resources in the Community
Uniqueness of case situation for program/phenomenon:  Afterschool program fostering active lifestyles	IV.
Relevance of case for cross-case Themes: Theme 1 <u>Motivated by Incentives</u> Theme 2 <u>Afterschool Programs, Strategies for Teacher</u> Theme 3 <u>Check Worksheet Marked Ms. S</u>	Possible excerpts for cross-case report:  Afterschool programs are considered community resources

Commentary:

“I earned a fun day by making all-stars. I would enjoy PE more and be more physically active for a fun day.”

Caregiver: “Making afterschool activities that deal with physical activity,”

Caregiver: “talking to him about the advantages on practicing physical activities and why it is good for his health.”

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Case ID Ms. S (Gorge Elementary)	
Synopsis of case:  Ms. S’s experiences are affiliated with all of the cases at Gorge Elementary. This document was used to highlight the factors within Theme 3.	Case Findings: I. Strategies to address bullying  II. Using positive reinforcement to motivate students  III. Using positive behavioral interventions and supports  IV.
Uniqueness of case situation for program/phenomenon:  Given the population she teaches, she acknowledges that the students do not receive enough positive comments as they should	
Relevance of case for cross-case Themes: <u>Theme 3 Classroom Management, Incentives, School-Wide Behavior Plan</u>	Possible excerpts for cross-case report:  Acknowledges the harmful effects of bullying
Commentary:  “I do feel that students’ motivation levels are affected because of bullying. Students do not want to try/participate in activities if they know that the bully will dislike or make fun of them, especially if the student has a higher skill level than the bully.”	

“At our school I would have to complete a write up of the bullying situation and turn it in to the office. To complete the write up, I would speak with the student who was being bullied first, so I can get an understanding of what types of behavior—words and/or actions—the bullying student was using. I would then speak with the student who was doing the bullying, to get his side of the situation. This information would be written down and turned in to the guidance counselor and principal for further review.”

“Within my classroom, I would talk to the students about respecting each other and only using positive/nice words to each other. I always ask the bully how they would feel if the roles were reversed or what if it was a family member getting bullied. They seem to change their minds about their actions once they have done this. If I observe any other issues with the students, I will try my best to keep them separated during my class activities.”

“Some students will participate more when they know the teacher is looking for good behaviors. The students who are rule followers all the time now get a chance to be recognized. Some students will be motivated if they receive positive reinforcement if they don’t normally hear positive things. It might only take that one positive reinforcement to change a child around.”

“I feel some students will participate only for the moment to earn a “token” but the behavior has not been corrected for good. If the teachers are not consistent with giving positive reinforcements, then students who don’t want to participate will not change and could cause other students to become less motivated to participate.”

“A student was having trouble working with partners and trouble with sharing. I came up with a plan and told the student to see if he could be a “helper” with his partner. See if he could help his partner with throwing the ball at the target, kind of like a “coach.” He seemed to like the idea, and every time I noticed him helping/coaching, then I would recognize that behavior sometimes individually and sometimes in front of the entire class. He continued with this plan and is now able to work well with partners.”

“A student was having trouble following directions

and lining up with his hands to himself. I gave several other students positive reinforcement of their good behavior by lining up with hands to themselves. I even quietly reminded this student to do the same thing, and he chose not to. He kept touching the students around him, and I had to remove him from the line. I spoke with him individually about “his challenge,” see if I can catch him next time lining up with his hands to himself. He appeared to listen and agree with the challenge. The next class I reminded him before lining up that I would be watching to catch him. First thing he did was push the student in front of him, so I started picking out other students who were lined up with hands to themselves to see if he would remember the challenge, but he continued to use his hands no matter which student was near him.”

“Yes, some students have benefitted and become better behaved students. I have only seen this if the entire school is consistent with the PBIS program.”

“The students who were already behaving and following the school rules are now able to be recognized and hear positive things they are doing correctly.”

“Yes, some of our students definitely want to know and see what they are going to get/win/receive if they follow the rules, instead of learning to behave for the right reasons. I feel that the program could be great, but there are still things that need to be fixed. The hardest part for the program to work is that you have to have all staff and school employees on the same page with the same understanding of expectations.”

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Case ID Ms. F (Lauder Elementary)	
<p>Synopsis of case:</p> <p>Ms. F’s experiences are affiliated with all of the cases at Lauder Elementary. This document was used to highlight the factors within Theme 3.</p>	<p>Case Findings:</p> <p>I. Strategies to address bullying</p> <p>II. Using positive reinforcement to motivate students</p> <p>III. Using positive behavioral</p>

	interventions and supports
Uniqueness of case situation for program/phenomenon:  Identified praise as a staple in a quality PE environment	IV.
Relevance of case for cross-case Themes: Theme 3 <u>Addresses Bullying Accordingly, Praises when Possible, Uses PBIS to Spot-Light Students' Achievements</u>	Possible excerpts for cross-case report:  Uses praise as form of positive reinforcement, instead of prizes
<p>Commentary:</p> <p>“I believe that students’ motivation levels are negatively affected due to bullying. If a student is bullying another student, he or she is using words or committing actions that are emotionally or physically hurting the other student. If a student feels hurt, his motivation to do anything is negatively affected because he is focused on his feeling.”</p> <p>“If a child was being bullied, I would first separate the two children. I would then ask each child separately what was said and done. I would talk to the child who was bullying and remind them of the effects that their words/actions have on others. I would then have the child doing the bullying apologize to the student he or she was bullying. If necessary, I would send the student to the office to speak to the principal or send him to our PAWS Room to speak to the counselor about his actions.”</p> <p>“My main strategy that I use to motivate students that withdraw from Physical Education because of lack of motivation is Specific, Positive Praise. I have found that all students love to be praised. Specific, positive praise also encourages and motivates them to continue doing their very best at the task at hand.”</p> <p>“Positive reinforcement is the major factor in students' motivation levels, especially in the Physical Education setting. When I give my students specific, positive praise, it is instant</p>	

encouragement and motivation that makes them want to continue the skill and improve in the skill.”

“I do not think positive reinforcement can be “bad”; however, it can be “better” if it is specific. For example, if I tell students “good job,” that motivates them, but it is not motivating them to continue thinking about and working on a specific skill. If I say, “I love how you are dribbling the ball with your fingertips,” they will remember that specific, positive praise and continue working on that aspect.”

“I believe PBIS should be implemented in every school. Having the ability to reward students for their positive behavior is a huge motivating factor for students.”

“As a teacher, I love that I have the ability to reward students for their positive behavior. I believe incentives motivate students to show positive behavior because they see the connection of positive behavior with incentives. When I see a student praise another student, I give him a red ticket (incentive), and this reminds him that this is an important behavior in Physical Education.”

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Case ID: Mr. D (Field Elementary)	
Synopsis of case:  Ms. D’s experiences are affiliated with all of the cases at Field Elementary. This document was used to highlight the factors within Theme 3.	Case Findings: I. Strategies to address bullying  II. Using positive reinforcement to motivate students  III. Using positive behavioral interventions and supports
Uniqueness of case situation for program/phenomenon:  Notes an inconsistency within the school	IV.
Relevance of case for cross-case Themes:	Possible excerpts for cross-

<p>Theme 3 <u>Negative Impact of Bullying, Praise, School-wide Behavior System</u></p>	<p>case report:</p> <p>Acknowledges the positive correlation between engagement and positive reinforcement, but identifies an inconsistency among fellow teachers</p>
<p>Commentary:</p> <p>“I do think that some students’ motivation levels are negatively affected. I don't see a lot of bullying, but what little bit I do see, most students don't let it affect them. They become disinterested for a moment and then pick right back up where they left off.”</p> <p>“If a child is being bullied in my classroom, I am first going to talk to the child responsible for the bullying. Afterward, I am going to consult with the principal and classroom teacher to address the bullying.”</p> <p>“Most students who withdraw from an activity in my class withdraw because of embarrassment or they simply are “winning” the game. I try and motivated these students by letting them know how great of a job they are doing. I also let these students be my helpers for that day.”</p> <p>“I do think that PBIS with the use of positive reinforcement should be implemented into every school because we all need positive comments in our lives.”</p> <p>“The only downfall I see when offering incentives is if a child does not receive the incentive or incentives offered. If this happens I see a complete shut down and unwillingness to try from the student.”</p>	

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Positive Reinforcement	X							
Friendship	X							

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Gorge Elementary (Male)	Themes							
Messi	1	2	3	4	5	6	7	8
Positive Reinforcement	X							
Organized Family Activities		X						
Sam								
Positive Reinforcement	X							
Using Resources in the Community		X						
Friendship	X							
Nemar								
Friendship	X							
Taking Part in Education		X						
Using Community Resources		X						

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Lauder Elementary (Female)	Themes							
Dolly	1	2	3	4	5	6	7	8
Positive Reinforcement	X							
Caregiver Takes Part in Education		X						
Takes Advantage of Resources		X						
Bullying	X							
Katy								
Positive Reinforcement	X							
Organized Family Activities		X						
Caregiver Takes Part in Education		X						
Sally								
Friendship	X							
Organized Family Activities		X						
Opportunities for Children to be Active		X						

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Lauder Elementary (Male)	Themes							
Staff	1	2	3	4	5	6	7	8
Positive Reinforcement	X							
Take Advantage of Community Resources		X						
Zombie								
Positive Reinforcement	X							
Allow Opportunities for Children to be Active		X						
Take an Active Role in Education		X						
Rio								
Friendship	X							
Active Role in Education		X						

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### APPENDIX D: ASSERTIONS

#	Assertion	Evidence in Which Cases
1	Students' motivation to actively engage in PE and leisurely physical activities increases when there is an incentive to do so; they are increasingly more likely to be physically active at home when they have friends to play with in the neighborhood; and their desire to participate in PE is higher when effective classroom management prevents bullying and other students' poor behaviors from negatively impacting their achievement levels in class.	Check Individual Case Worksheets For Students
2	To increase a young person's motivation to engage in PE and leisurely physical activity, a caregiver's family must be active as a family; caregivers must provide opportunities for their children to be active in the community; and the caregivers must take an active role in their children's education.	Check Individual Case Worksheets For Caregiver Comments
3	It is the role of the PE teacher to address bullying proactively to ensure the victim is not demotivated by the situation; he or she must use incentives as a means of positive reinforcement responsibly by ensuring the prizes are valued and given at the appropriate times; and finally, he or she must make certain that all teachers follow the PBIS program consistently to reinforce the more desirable behaviors.	Check Individual Case Worksheets For Teachers

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**APPENDIX E: CONSENT/PERMISSION FORMS****Consent Form**

Over the course of the next several weeks, I will be conducting research in physical education classes. You and your child will answer questions based on your experiences with physical education, extracurricular activities, and your overall opinion of exercise.

Questionnaires will be used to obtain your opinions about physical education and physical activity. There are no invasive questions beyond your personal experiences relating to physical activity.

You and your child are free to answer the questions you are comfortable answering. There are no requirements that will require participation. If at any time your child desires not to participate, he or she is free to remove himself or herself from the study.

If you are willing to have your child participate, please sign and return this consent form. If your child is not going to participate, it is not necessary to return the form. Regardless of your decision, thank you for considering the opportunity.

Parent/Guardian Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Parent/Guardian Print: \_\_\_\_\_ Date: \_\_\_\_\_

Researcher Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Researcher Print: \_\_\_\_\_ Date: \_\_\_\_\_

**Permission Form**

Over the course of the next several weeks, I will be conducting a research study about physical education. You will have the opportunity to answer questions based on your experiences in physical education, how you play outside of PE, and your overall opinion of physical activity. There are no questions that are too difficult to answer, and you will never get into trouble by leaving a question blank.

You are free to answer the questions you are comfortable answering. There are no requirements that will force you to participate. If at any time you wish to discontinue your participation, you are free to remove yourself from the study.

If you are willing to participate in the study, please sign and return this permission form to your teacher. If you are not going to participate, it is not necessary to return the form. Regardless of your decision, thank you for considering the opportunity.

Student Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Student Print: \_\_\_\_\_

Date: \_\_\_\_\_

Researcher Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Researcher Print: \_\_\_\_\_

Date: \_\_\_\_\_

## APPENDIX F: PERMISSION TO REPRINT

FW: Reproduction Permissions Request

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**From:** Mandy.Sparber@guilford.com <Mandy.Sparber@guilford.com> on behalf of Permissions@guilford.com

<Permissions@guilford.com>

**Sent:** Tuesday, May 20, 2014 9:51 AM

**To:** Beam, Jesse Tanner

**Subject:** Re: Fw: Reproduction Permissions Request

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Please let me know if you have any questions.

Best,

Mandy