Theses and Dissertations

8-9-2014

An Examination of Relationship Factors Contributing to Student Persistence in ING Run for Something Better

Brice Leon Sampson Cockfield
University of South Carolina - Columbia

Recommended Citation

Cockfield, B. L.(2014). *An Examination of Relationship Factors Contributing to Student Persistence in ING Run for Something Better.* (Doctoral dissertation). Retrieved from https://scholarcommons.sc.edu/etd/2801

AN EXAMINATION OF RELATIONSHIP FACTORS CONTRIBUTING TO STUDENT PERSISTENCE
IN ING RUN FOR SOMETHING BETTER

by

Brice Leon Sampson Cockfield

Bachelor of Science
Newberry College, 1999

Master of Education
Columbia College, 2003

Master of Education
University of South Carolina, 2004

Education Specialist
University of South Carolina, 2009

_____

Submitted in Partial Fulfillment of the Requirements

For the Degree of Doctor of Education in

Curriculum and Instruction

College of Education

University of South Carolina

2014

Accepted by:

Rhonda Jeffries, Major Professor

Zach Kelehear, Committee Member

Peter Moyi, Committee Member

Tambra O. Jackson, Committee Member

Lacy Ford, Vice Provost and Dean of Graduate Studies

DEDICATION

This project is dedicated to my beautiful wife, Candace who has always given her all to me. Without her love and support this project would not have been possible. She keeps me grounded, keeps me laughing, and keeps challenges in perspective. We have grown together through this process and this degree belongs to her just as much as it belongs to me. I love you.

And to my children, Cinnamon, Jalen, and Jaren, you are all the best—so brave and talented and intelligent. You are all so kind, and you are growing into the kind of people anyone would be proud to know. Continue to pursue your dreams with all your might. Know that obstacles are just opportunities in disguise and that tests lead to great testimonies. Each of you is special in your own way. Daddy loves you, too.

Finally, to my mother and father. Mom, you went away too soon, but you left me with something special. Thank you for that. Daddy, you are a man amongst men. You gave your all every day and inspired me to be all that I can be, to keep a positive attitude, and to never be defeated—to do more by 9 a.m. than most people do all day! You are a rock, a beacon of hope, a tower of strength. You always point me in the right direction. You have shown me what it means to be blessed. I hope you know how instrumental you have been in helping me get to this point today. I could never repay you.

Honorable Liston and Annie Mae Cockfield—the dream is alive and well, and your

legacy lives on.

ABSTRACT

There is sufficient empirical evidence that children are more unfit now than ever before in the history of the United States. Defeating childhood obesity is a critical agenda issue for the First Lady Michelle Obama as the medical community and the United States at large continually cite research that obesity, poor nutrition, and low physical activity may affect children's cognitive and physical outcomes. Much of the research in this area is quantifiable and measurable through body mass index, the number of repetitions of certain exercises, and physical stamina. As schools search for solutions to address this epidemic, school nutrition and increased minutes of physical activity have been the primary methods of doing so. However, an area of interest is creating transference from physical education class and healthy meals in the context of school to the personal lives of students.

The purpose of this study is to analyze interviews of participants in a before-school running program, their teachers, and their parents to understand the relationships that exist in the lives of students that foster perseverance with rigorous physical activity. The research site is an elementary school in rural South Carolina where 82% of school attendees receive subsidized meals. Through an evaluative case study of interviews with six students, four teachers, and three parents, self-determination theory, achievement goal theory, and self-efficacy theory frame this examination of the relationship factors that

contribute to student perseverance in this before school running program. Through

triangulation of the interview process, I develop a framework for understanding the

relationships that exist in the lives of the students which contributed to their motivation to

persevere to the point of completing a five-kilometer race. Through interviews with

students who did and did not persevere and examining all aspects of the structure of the

program, a clearer understanding of the requirements for successful continuation of the

before-school running intervention at this site will be discussed.

TABLE OF CONTENTS

CHAPTER 1: INTRODUCTION TO THE STUDY

"The physical and emotional health of an entire generation and the economic health and security of our nation is at stake."- First Lady Michelle Obama at the Let's Move! launch on February 9, 2010

This study is about student persistence in the ING Run for Something Better (ING RFSB), a before-school running program implemented to increase physical activity, combat childhood obesity, and actively engage fourth and fifth grade students at the elementary school site where the study took place. In the fall of 2010, the research site was awarded a grant for 2,000 dollars to implement a free, school-based running fitness intervention through ING RFSB, a charity run by the ING Community Fund that partners with the National Association for Sport and Physical Education (NASPE) to help participants become more fit.

Before the program was implemented, students were required to sit in hallways between the time they arrived at school and when they were allowed to enter classrooms. Adequate activities had not been implemented at this school site to promote physical fitness before the start of the school day, and students were powerless to change their environment to accommodate this need for movement.

For four consecutive years, the program has been operating at the research site as an eight-week program in the fall that concludes with a culminating event. Past culminating events have included the students' families at off-campus competitive runs, certificates for participation, and a physical fitness evening at the site with guest speaker from a local hospital to discuss health and wellness with families. In addition to the

culminating events, the program coordinator has been required to submit pre- and post-data for students involved in the program to NASPE.

Each year, initial enrollment in the intervention was phenomenal. To receive the grant, the school had to guarantee participation of at least 25 students. In the inaugural year, one-third of the 200 students in fourth and fifth grade participated. Funds have generally been depleted by the spring, so the field trips and other incentives to participate at that time of year have been limited. Although the site did not apply for the grant from ING RFSB in the 2012 and 2013 school years, the program still continued.

School leaders and educators at this site may be able to assist participants in forming productive relationships and engaging in rigorous physical activity by offering quality physical fitness activities with opportunities to socialize with new students. At this site, ING RFSB was implemented as a before-school program as a convenience for the families at the school site where 80% of families receive subsidized meals. Understanding that many participants would not have transportation after school, program coordinators decided to take advantage of the time before school when students were inactive. The majority of students were bus riders with 35-40 minutes of inactivity before the start of the school day, and the program coordinators wanted to provide something to look forward to before the start of the school day. For the students who arrived in cars, the coordinators wanted to provide further incentive to arrive early and be energized for the start of the school day. In the fall of 2013, this intervention provided students with a free-choice opportunity to participate in a noncompetitive environment with the goal of being able to complete a 5K race before the program ended in spring 2014.

As far as it was possible to do so in an environment with 50 young males, I attempted to create a noncompetitive setting since it has been found that competition generally promotes ego involvement (Butler, 1989: Frederick & Ryan, 1995). This research attempts to explain why students either did or did not persevere until the end of the program. Drawing on motivation research, there were few tangible rewards for participation since Deci (1971) found that extrinsic rewards thwart motivation whereas verbal feedback and positive reinforcement serve to enhance intrinsic motivation.

Unlike the research I conducted for a pilot study with this program, I decided not to focus attention on the reasons why students initially chose to participate in the program and whether continued participation was ego-driven or intrinsic in nature as delineated by Reeves and Deci (1996). As they explained, individuals with intrinsic motivation seek novelty and interesting challenges. Ego-driven individuals would continue with the program even if they experienced difficulty to regain their sense of self-worth.

Statement of the Problem

Sufficient evidence abounds that children are more unfit now than ever before in the history of the United States. Childhood obesity is a growing concern in the United States, and this concern reaches far beyond the medical community. Research has shown that obesity, poor nutrition, and low physical activity may affect children's cognitive and physical outcomes. In 2010, First Lady Michelle Obama launched a bold response to this national crisis: *Let's Move!* The campaign was developed with the objective to eradicate the epidemic of childhood obesity within a generation (John W. Gardner Center, 2010).

This research site, like many others, had made the hard choice to decrease recess and physical education in order to increase academic scores despite the apparent

connection between physical activity and academic performance and behavior (Tompkins, Hokpins, Goddard & Brock, 2012). Holt, Bewick, and Gately (2005) asserted that over the past three decades, childhood obesity rates in America have tripled and that almost one in every three children in the United States is overweight or obese. The numbers are even higher in African American and Hispanic communities where nearly 40% of the children are overweight or obese. At current rates, one third of all children born in 2000 or later will suffer from diabetes at some point in their lives. Many others children will face chronic obesity-related health problems like heart disease, high blood pressure, cancer, and asthma (Let's Move, 2011).

Hillman, Erickson, and Kramer (2008) professed that participants have not only become more unfit but, for the first time in United States history, may live less healthy lives than their parents. Donnelly et al. (2009) asserted that sedentary behavior was associated with increased body-mass index (BMI) and increased risks of co-morbidities such as Type 2 diabetes in children. They recommended that schools intervene since 98% of United States children are enrolled in school. However, schools may be a barrier to the necessary intervention since pupils are required to sit, often in excess of six hours each day, as passive learners for prepared academic lessons.

Running is a reasonable, appropriate activity that can also serve as a leisure activity, which can persist over a lifetime. At this research site, initial enrollment in this before-school running intervention to address childhood obesity and inactivity was promising. However, as the program continued each year through the eight-week cycle in the fall and again in the spring, differences in student motivation and enthusiasm to participate emerged. Although the majority of students remained affiliated with the

program, some would only show up sporadically, and too many discontinued participation altogether. I sought to investigate the phenomenon of persistence among the students involved ING RFSB at this research site.

Research Purpose

The purpose of this study was to delineate the relationship factors that positively and negatively affect student persistence in ING RFSB at this research site. I determined, through an investigation in a pilot study, that most participants wanted to have fun in the program and be with their friends. This investigation further examined those relationships students have formed inside and outside the school context that affect their level of persistence with the ING RFSB intervention.

The long-term objective of the program was to combat childhood obesity and promote physical fitness among fourth and fifth grade students. A short-term objective was to provide a way for students to be actively engaged prior to the official start of the school day so students arrived in class energized and prepared to learn. Research is clear about the need to incorporate physical activity to optimize learning. ING RFSB was initiated to capitalize on the inactive periods in the mornings by offering a beneficial alternative for students who were available and willing to engage in rigorous physical activity.

My interest in understanding student perseverance in ING RFSB stemmed from my involvement in the program over the past four years. As program coordinator, I was intrigued by the reasons students chose to join a program that met at an inconvenient time with only a few tangible rewards spread out over several weeks. Despite my skepticism, the program continued to grow and my approach to organizing the program evolved.

Although the program was successful as measured by initial enrollment, inevitably we lost a large percentage of the participants who had initially committed themselves to the program objectives, and this phenomenon has led to the current investigation.

The percentage of females who joined ING RFSB each year was always about one-third the enrollment of male participants. In the fall of 2013, more than 75% of the females who initially joined ING RFSB had left the program before the first eight-week portion in the fall had been completed. I wanted to gain more insight into this phenomenon at the research site through an in-depth analysis of interviews with male and female students, parents, and teachers. The main objective of the research project was to understand how perseverance had been developed in the participants at this site and whether there were significant relationship factors that influenced some participants to persist in difficult tasks when others withdrew.

I analyzed student, teacher, and parent perspectives about relationship factors that contributed to persistence in the participants in ING RFSB at this research site to understand those elements both inside and outside the program that encouraged and developed persistence to complete the eight-week program.

Research Questions and Significance of Study

This study explored the following research questions:

1. How do elementary students in a voluntary before-school physical activity program perceive relationship indicators which impact program persistence?

2. How does parental, teacher, and peer involvement impact the program persistence of elementary-level students in a voluntary before-school physical activity intervention?

6

This research is important to the fields of education and physical fitness because it combines student, teacher, and parent perspectives to the dialogue on childhood obesity, increasing physical fitness, and developing resiliency in preadolescent youth. I hypothesized the interviews would yield important insights to foster more effective implementation of ING RFSB at the research site and yield insight about how to better augment perseverance among students in rigorous physical activity through more effective implementation of programs like ING RFSB. Perhaps the study site could eventually implement similar programs that interest other specific populations within the school setting.

Largely, United States schools have yet to determine how to design exercise programs and interventions that optimize the brain-body connection. Up to this point, exercise has been viewed as a quantifiable activity which improves cognition in young and aged animals and humans (Praag, 2009). Studies like this current one, that tell the stories of participants who are actively involved and those who are not, may yield valuable insight that is not quantifiable.

There is abundant research about motivation and the benefits of physical activity, but ethnographic research and the testimonies of individual students are sparse. Holt, Bewick, and Gately (2005) interviewed 15 attendees of a residential pediatric weight loss camp and concluded that enjoyment, support from peers and staff, and choice were positive elements of a camp experience. There is ethnographic evidence pertaining to the value and management of physical activity within families. In their study, MacDonald et al. (2004) found that physical activity was valued across different family contexts, and

engagement in physical activity was shaped by interests, friendships, safety, income, family configuration, parental work commitments, and transportation.

Mohr, Townsend, and Pritchard (2006) concluded that research with preadolescent involvement in physical activity is yet to reveal how to transfer involvement from elementary to middle school to adulthood, especially among female students. Knisel, Optiz, Wossmann, and Ketelhut (2009) clearly articulated the need for schools to implement more structures for intervention with a special focus on female students. It is important that elementary schools understand this link since physical inactivity appears during adolescence and boredom with physical activity increases with age (Barkoukis et al. 2010).

Yli-Piipari, Watt, Jaakkola, Liukkonen, and Nurmi (2009) used self-motivation theory to identify and compare profiles representative of high and low intrinsically and extrinsically motivated groups of sixth grade students. They identified significant differences between these two profiles in enjoyment, stated anxiety, and self-reported engagement in physical activity. After completing a study with 429 sixth grade students, they concluded that the differences in the two profiles posed a particular challenge to educational professionals in their work to ensure that all students were highly motivated as a result of their experiences in school physical education.

Theoretical/Conceptual Framework

This study is situated in post-positivist theory in that I attempted to understand the indicators for persistence in ING RFSB at this site. In most physical education classes, the concern is on the number of repetitions a child can complete, the distance he or she can run, BMI, and numerous other quantifiable variables. This study differs since there

was neither a passing nor failing score for achievement goals as one would expect to find in most physical education curricula. Instead, the goal of ING RFSB was self-mastery, and the purpose of the project was to understand why some participants continued to persist while others did not.

In addition to a post-positivist perspective, this work is grounded in self-efficacy theory, achievement goal theory, and self-determination theory.

Self-efficacy theory. Bandura (1994) espoused the theory that a child's sense of personal agency begins as a newborn, born without any sense of self, who then, through exploratory experiences, learns that actions produce outcomes. Infants who experience success in manipulating the environment for a desired end become more attuned to their own behavior and more proficient in learning newer more effective responses than infants for who there is perceived minimal environmental changes despite their efforts to manipulate them. Bandura asserted that producing effects by actions, although a starting point for personal efficacy development, is not sufficient until the child internalizes the behavior and perceives the actions to be part of him or herself.

Bandura (1977) asserted that the child's family is an important source for self-efficacy development since it is important for participants to build upon their self-knowledge in expansive areas of their functioning lives. A child's physical limitations, language skills, and cognitive skills are tested in daily situations, and participants continuously appraise and test their own skills. Early exploratory and play activities serve to develop the child's sensorimotor capabilities and broaden the exploratory environment and his or her approach for interacting within it. Accelerated social and cognitive development are the result of parents being attentive and responsive to their child's

9

behavior and providing opportunities for productive actions by providing an enhanced physical environment and permitting freedom of movement for exploration. Parents and children serve as reciprocating influences for each other. Parents become more alert to the child's developing needs and the child's reasoning competencies improve. And as the child broadens her capabilities, the parents become even more alert and astute to the changing demands.

Although the initial efficacy experiences are centered in the family, a developing child's social world rapidly enlarges as peers reveal more in the child's developing self-knowledge of her capabilities through social comparison. This may begin with comparisons inside the family structure with different families presenting different contexts for social comparison; Younger siblings may find themselves, often unfavorably, comparing their capabilities to older siblings who may be well advanced in their development. But as participants move into the larger community, their efficacy is tested even more in peer relationships.

Peers serve several important efficacy functions. In particular, peers with more experience and competence provide examples of effective styles of thinking and behavior. Since an immeasurable amount of social learning occurs among peers, peers of the same age provide informative comparisons for evaluating and verifying one's beliefs in self, and this makes participants very thoughtful about their comparative standing among their peers in activities that determine status and admiration.

Children tend to choose peers who share similar interests and values. As participants select peer associations, these relationships tend to promote self-efficacy of mutual interests and leave other possibilities underdeveloped. Disrupted or impoverished

10

peer relationships can adversely affect the growth of personal efficacy since peer relationships have a major influence on the development and validation of self-efficacy. Low social efficacy may create internal barriers to favorable peer relationships forcing participants to withdraw, perceive low acceptance by their peers, and have a low sense of self-worth.

Schools serve as an agency for cultivating cognitive self-efficacy as the places where participants develop the cognitive skills and procure the knowledge and problem-solving skills essential for effective participation in the larger society. Schools continually test, evaluate, and socially compare students' knowledge and thinking skills. Intellectual efficacy increases as students master cognitive skills. Aside from formal instruction, various other social factors such as peer modeling of cognitive skills, social comparison with other students' performances, the enhancement of motivation through goals and positive incentives, and teacher summations of students' successes and failures may all reflect favorably or unfavorably on the student's judgments of their intellectual efficacy.

Achievement goal theory. Achievement goal theory separates action into two broad categories: mastery and performance goals. Ames (1992) and Dweck (1986) defined goals established to develop competence as mastery goals and those developed to demonstrate competence as performance goals. The way an individual approaches, engages with, and responds to an achievement-related activity depends largely on her or his orientation toward mastery or performance goals (Ames, 1992). Siderodis and Kaplan (2011) summarized the general distinctions between mastery and performance goals and summarized that mastery goals were generally associated with adaptive cognitive,

11

affective, and behavioral patterns. The behavior patterns associated with mastery goals include positive affect and well-being optimism, beliefs in the link between effort and success, high performance, and task-relevant cognitive and metacognitive strategies at a deep level. Not only do students' mastery goals strongly influence academic achievement (Raccanello & Bernardi, 2013), but Gonida, Kiosseoglou, and Voulala (2007) concluded that adaptive learning patterns were optimized when parents emphasized mastery goals as well. On the other hand, performance goals are most often associated with surface level cognitive strategies, negative effects and lower well-being, school disruptions, and cheating in school.

Self-determination theory. Deci and Ryan (2000), self-determination theorists, posited that human beings can be proactive and engaged or, alternatively, passive and alienated, largely as a function of the social conditions in which they develop and function. Self-determination theory is a construct for examining human motivation and personalities that uses customary empirical methods and an organismic metatheory that highlights the importance of the evolved inner resources humans possess for personality development and behavioral self-regulation. Self-determination theory is the realm of investigation of a human's inherent growth propensities and inborn psychological needs that are the basis for self-motivation and personality assimilation, as well as for the conditions that foster those positive processes. Deci and Ryan (1985) identified three such needs: the need for competence, the need for relatedness, and the need for autonomy. Competence is the desire to be competent in encounters with the surroundings. Relatedness is the desire to belong or connect with a particular group. Autonomy reflects the desire to be able to choose one's behavior. Deci and Ryan posited competence,

relatedness, and autonomy were indispensable for enabling optimum functioning of the natural propensities for growth and integration, as well as for constructive social development and personal wellbeing. Covington (1998) espoused a theory of motivation as well in which he proposed only one basic human need, the need for personal self-worth. He asserted that as students attempt to validate their sense of self-worth, they either approach or evade different academic tasks.

Operational Definitions

Extrinsic motivation: refers to the performance of an activity in order to attain some separable outcome which may vary in relative autonomy (Deci & Ryan, 2000).

ING Run for Something Better (ING RFSB): a free, school-based running fitness intervention through ING RFSB, a charity run by the ING Community Fund that partners with the NASPE to award grant money for schools to implement school-based running programs.

Intrinsic motivation: the inherent tendency to seek out novelty and challenges, to extend and exercise one's capacities, to explore, and to learn for the inherent satisfaction of the activity itself (Deci & Ryan, 2000).

Grit: perseverance and passion for long-term goals.

Persistence: purposive behavior enabling the continual release of energy directed toward a goal despite task difficulty.

Mastery goals: goals with an aim to develop one's own competence.

Performance goals: goals that target superiority over others.

Summary

Stating that the economic health and security of the nation rests on the shoulders of the youth in the United States places a heavy burden on educators and schools since children spend a significant part of youth in the school. ING RFSB and programs like it have found a way to interest students in rigorous physical activity, but individual sites must be able to do more to encourage persistence in these programs so participants adopt life-long physical fitness as an integral part of a well-balanced, productive lifestyle. This research delves into relationship factors that have kept participants involved at one elementary school site where voluntary participation in rigorous physical activity in the form of a running program has been implemented to encourage physical fitness.

This chapter introduced the background of the study, presented its significance, and outlined the specific research questions. Chapter 2 will review the relevant literature and Chapter 3 will provide an overview of the selected methodology.

CHAPTER 2: REVIEW OF THE RELATED LITERATURE

This review of literature examines the constructs relevant to motivation to persevere in

ING RFSB, a running program for students in fourth and fifth grades at one elementary

school site. I begin with a body of literature outlining the connection between physical

activity and cognitive ability and the importance of the physical education curriculum in

schools. Then I will present a second body of literature about motivation, which will

include two constructs for understanding motivation, gender differences, and academic

achievement in respect to motivation.

The Mind/Body Connection

Physical activity increases cardiovascular endurance and respiratory efficiency

and regular exercise reduces the risk of coronary heart disease, obesity, and hypertension.

Xiang and McBride (2004) maintain that exercise has psychological effects as well,

enhancing both competence and self-esteem. Sedentary behavior has the opposite effect.

Donnelly et al. (2009) asserted that sedentary behavior is associated with increased BMI

and increased risks of co morbidities such as Type 2 diabetes in participants.

Overwhelming evidence supports a connection between physical fitness and

cognitive ability. According to Hillman et al. (2008), the roots of a belief in the mind-

body connection date back to at least the ancient Greeks. Scientific investigation of this

phenomenon was documented in the 1930s. Hillman cited a plethora of evidence to

suggest that 30 minutes of daily moderate physical activity is momentous, yet 74% of

adults in the United States do not meet this minimum requirement even though physical

activity has been shown to reduce cardiovascular disease, colon and breast cancer, and obesity.

Schmidt-Kassow, Kulka, Gunter, Rothermich, and Kotz (2010) asserted physical activity aroused the brain, which makes it ideal for improving learning. They cited several research studies that declared regular exercise prevents cognitive decline in elderly patients and results in improved performance in reasoning tasks, working memory, reaction time, and vocabulary measurements. Short, intensive physical activity undertaken prior to a learning session yielded the best learning outcomes on vocabulary tasks in older adults. They concluded that simultaneous physical activity enhances learning in both elderly and young adults. Diamond and Lee (2011) found that aerobic exercise, in the form of gradually more strenuous running, improved prefrontal cortex functioning by improving cognitive flexibility and creativity in participants 8-12 years of age.

Animal research has revealed that animals that engage in physical activity have positive neuronal growth and positive effects on their neural systems connected to learning and memory. This indicates that physical activity influences cognitive function and the supporting brain structures. Stroth et al. (2010) referenced the work of numerous researchers and concluded that regular exercise stimulates brain vascularization and increased levels of dopamine and noradrenalin. Although these changes created better learning in animals, they admitted that the association between improved cognitive function and exercise in adults needs further investigation. There is some evidence which points to the connection between the prefrontal cortex and dopamine. Dopamine has been

studied extensively for learning, and it is known that dopamine administration does improve brain function.

Aerobic exercise in children is associated with increased cognitive processing speed, increased measures of neuroelectric responsiveness, and better performance on test of cognitive control. There is also a positive relationship between cognitive and academic performance and physical activity for school-aged children (Ploughman, 2008).

Different cognitive processes benefit from exercise, and there are specific effects in the area of executive control processes. Executive control processes include scheduling, planning, working memory, multitasking, and dealing with ambiguity. Executive control processes are mainly supported in the prefrontal cortex of the brain and can have implications for success in school. Molecular, cellular, behavioral, and systems-level research all point to the potential benefits of physical activity on cognition throughout a lifespan.

Stroth et al. (2010) examined a sample of 75 participants that consisted of runners and non-runners and found improved cognitive flexibility, cognitive control, and working memory were positively affected by physical fitness. Hillman et al. (2008) also concluded that physical activity and aerobic physical fitness can have a positive effect on multiple aspects of brain function and cognition. Praag (2009) determined that physical activity improves cognition and may delay age-related memory decline. He suggested that exercise may protect against brain damage caused by stroke, enhance recovery after injury, and function as an antidepressant.

The amount of time devoted to physical health-based activities in school did not hinder, and may in fact have increased student academic performance in other areas.

Donnelly et al. (2009) reported that academic achievement improved in a Physical Education Across the Curriculum (PAAC) intervention. In their study, BMI did not increase as significantly for participants who were enrolled PAAC schools as it did for participants in schools that did not ensure more than 75 minutes of physical activity for students each week.

Fox, Barr-Anderson, Neumark-Sztainer, and Wall (2010) point out that the connection between physical activity and academic performance when students participate in team sports is complex, since it remains unclear whether improved academic achievement should be attributed to the benefits of physical activity or the benefits of participating on an athletic team. They point to past arguments that sports team participation nurtures identification with schools and school-related values such as performing well academically. Their own study with adolescents showed higher grade point averages among males and females in both middle and high school, but they could not pinpoint a clear independent variable associated with the improved grade point average of middle school students.

Physical Activity and Motivation

There is abundant evidence to suggest that various factors motivate participants and adults to participate in an activity. According to Holt, Bewick, and Gately (2005) obesity treatments for youth must be enjoyable, have support from peers and staff, and offer students choices. Their limited study revealed that these factors are traditionally not part of the students' lives away from the intervention program.

Chambers (1991) professed that participation in an activity is dependent upon an individual's perceived competence of their effort and ability with the task. Also, many

factors mask a person's true aspirations, especially in terms of academic achievement.

Vallerand (2000) defined motivation as multidimensional and provided a three-tiered

model of motivation. His model included situational (state), contextual (life domain), and

global (personality) levels. Each of these domains is affected by environmental factors

that, in turn, affect participant's perceived autonomy, competence, and relatedness (need

satisfaction), which affects motivation, which in turn affects the outcomes. There are

individual differences in autonomy, competence, and relatedness, and these individual

differences are important. Vallerand (2000) asserted that self-determined motivation has

the most positive effect on behavior. Solmon and Carter (1995) asserted that the student's

role in learning is very important and claimed that praise provides information about

desired behavior rather than motivating students and that praise may, in fact, be

counterproductive and decrease intrinsic motivation and perception of ability.

Maturo and Cunningham (2013) surmised overweight students, children with low

levels of competence, and children at high risk for low physical activity benefited most

from the involvement of friends in physical activity. They also presented strong evidence

that friendships have a significant impact on levels of physical activity.

Goal Setting

Deci (1971) asserted that the amount of time a person is willing to spend working

toward a stated goal is a measure of intrinsic motivation. As individuals establish and

move toward personal goals, their sense of well-being is enhanced (Brunstein, 1993). As

individuals advance toward goal attainment, they feel better about themselves and are

more likely to set additional personal goals than when they attempt to accomplish

external goals (Diener, 1984; Koestner et al., 2002). As individuals' feelings of well-

being are enhanced through effective goal setting, this may increase their self-efficacy and direct their behavior toward accomplishing higher levels of success (Latham & Seijts, 1999). Karakowsky and Mann (2008) asserted individuals are likely to set higher goals for themselves with higher expectations as they realize smaller goals.

Mariasano and Shore (2011) believed that personal goal setting may be an avenue to enhance academic achievement as it allows learners to establish a pathway toward improved performance, and they hypothesized that students need opportunities to make choices as they as they set their own goals. They asserted that the benefits of goal setting may be similar to findings from expressive writing studies: setting goals and organizing plans may minimize interfering and avoidant thinking. Such thoughts are generally manifestations of stress that impair cognitive functions such as memory, attention, and planning abilities, which then lead to ineffective study habits, disorganization, and lackluster academic performance. The discipline and motivation required for goal attainment needs to shift from dependence on teachers and parents to intrinsic feeling and values as the primary basis for action (Richert, 1991).

Noguera (2007) asserted that students with the clearest goals were most likely to refer to an adult as a significant guide to future aspirations. However, teachers and parents must grasp the difference between their goals for students and the students' own goals to avoid emotional conflict and the underachievement that may result when gifted students are pushed toward goals that are not in line with their personal values (Reis, 1998). Baum et al. (1995) found that the highest levels of student achievement are realized when students select their own topics to investigate. Morisano and Shore (2010) conclude the same reasoning should apply outside the academic domain, and similar

levels of success should be expected when participants select their own hobbies, careers, creative projects, and extracurricular activities. Weslowski (1982) found that students gain better self-awareness when they develop their own objectives that are within their means and realize their own possibilities.

Goal setting directs cognitive function and effort toward goal-relevant behaviors and away from goal-irrelevant behavior, energizing the individual, increasing persistence, and indirectly affecting action by leading to the stimulation, unearthing, and application of task-relevant knowledge and strategies. Davidson (1994, 1998) postulated a form of happiness, namely, pregoal attainment positive affect that arises as individuals anticipate an imminent positive outcome.

Gollwitzer (1999) asserted, "Forming good intentions or setting goals is understood as committing oneself to reaching desired outcomes or to performing desired behaviors" (p. 493). However, people seldom think through why they desire to reach specific goals. The impetus to accomplish a goal directly affects self-regulatory behavior whether or not the goal is attained (Koesner et al., 2002; Ryan, Sheldon, Kasser, & Deci, 1996). Bandura (1977) and Schunk (1991) both found that the process of delineating future expectations of goal attainment may be a source of motivation for the brain.

It is well documented that when people settle on goals, they should expect a positive outcome in regard to their ability to achieve the goal or they will be less likely to be highly motivated to follow through with behaviors relevant to the goal (Bandura, 1977; Perrone, Civiletto, Webb, & Finch 2004; Schunk, 1991). The perception of external obstacles may encumber converting goals into action (Lent, Brown, & Hacket, 2000). Goal attainment may also be stymied when the goals are too vague, strenuous, or

distant (Austin & Vancouver, 1996; Koestner et al., 2002). It has also been found that when participants establish inappropriate goals, those goals my affect their developing self-esteem. When participants establish goals that are excessively high, low, or vague, they may think of themselves as failures when they do not accomplish them (Webb, Meckstroth, & Tolan, 1982).

King and Miner (2000) proposed that written goals encourage self-regulation, produce health benefits, and Austin and Vancouver (1996) asserted that the self-regulatory processes used to establish, plan, strive toward, and decide upon goals can be expected to regulate emotions and internal conflict. Stein, Folkman, Trabasso, and Richards (1997) found that written goals were a good predictor of adaptive coping following the loss of the loved one. Furthermore, Bandura (1991) asserted that the self-regulatory systems mediate various influences and allow individuals increased control over their thoughts, feeling, incentives, and actions. Emmons and Diener (1986) realized a positive affect between for goal attainment and a negative affect for lack of goal attainment in undergraduate students.

Kaylor and Flores (2007) concluded that students who were presented with a specific model for goal setting articulated goals began a plan of action to accomplish those goals. Koestner, Lekes, Powers, and Chicoine (2002) also concluded that successful goal setting required structure. It is important not to establish too many goals at once and not to set goals that create internal conflict. Morsano and Shore (2010) asserted that regular, intensive, personal goal-setting could serve as an effective intervention for underachieving gifted students. Those goal-setting exercises may assist students in

developing self-understanding and in developing the creative and academic potential in academically gifted students.

It is important to develop specific strategies for goal attainment. Time frames and alternate game plans to ensure persistence in the face of distraction and obstacles are important in order to ensure the goals do not erode (Gollwitzer, 1999). For optimal results, goals must be specific, motivating to the individual, consistent with one's values, and enhanced by detailed implementation plans (Gollwitzer; Koestner et al., 2002, Locke et al., 1981).

Marisano and Shore (2010) concluded that goal attainment for gifted participants needed to be monitored closely because of their propensity for success in many domains. Multipotentiality can lead to problems with follow-through for these individuals (Perrone et al., 2004; Sajjadi, Rejskind, & Shore, 2001). Goal setting can help gifted students focus on which of their talents or interests to develop since they often unable to decide and are motivated to use all their talents at maximum capacity (Gallagher & Gallagher, 1994). This tendency often leads them to set too many goals at once and underachieve as they encounter frustration and lack of focus (Koestner et al., 2002). Self-confidence generally rises in gifted students when leaders help them pinpoint strengths and promote smaller performance accomplishments (Perrone, et al., 2004). Proper goal-setting practices may assist gifted learners in becoming more efficient at utilizing certain cognitive process and enhance neural capacity (Marisano and Shore, 2010).

Excessive emphasis on academic performance can lead students to adopt perfectionistic tendencies, setting up unrealistic goals and emotional strain. Arduous goals and pressure often lead to anxiety, which, when too intense, may cause excessive

worry and inability to concentrate on current tasks, disrupting performance on complex tasks (Locke et al., 1981; Wine 1971). Grant (1995) recommended that teachers and students find ways to moderate the perceptions of the importance of grades and test scores by placing more emphasis on setting and attaining personal goals. Fuchs, Fuchs, and Deno (1985).

The Expectancy Model of motivation is associated with perceptions of competence. The Expectancy-Value Model of Achievement Choice deals with ability and expectations for success. The incentives to participate in an activity must have attainment value (importance), intrinsic value (interest), and value (usefulness). A study of 125 fourth graders revealed a significant relationship among achievement goals, experience-related beliefs, and subjective task value.

Mastery and Performance Goals

Personal interest and beliefs about past experience exert an influence on motivation and achievement. Xiang and McBride (2004) outlined Achievement Goal Theory and expounded upon mastery goals, performance goals, and work avoidance goals. Mastery goals describe those goals with an aim to develop one's own competence whereas performance goals are those that target superiority over others. Mastery goals are associated with working hard, choosing challenges, persistence, and positive views about the relationship between success and effort. Performance goals are generally less adaptive and may cause some students to avoid challenges and view success in terms of ability. On the other hand, many people support performance goals because they have been shown to increase self-efficacy, increase the value in academic work, improve course grades, and

improve test scores. Work avoidance goals require minimal effort and are superficial learning strategies that have a negative relation to subject matter and coursework.

Ames (1992) and Dweck (1986) defined goals established to develop competence as mastery goals and those developed to demonstrate competence as performance goals. The way an individual approaches, engages with, and responds to an achievement-related activity depends largely on her or his orientation toward mastery or performance goals (Ames, 1992). Siderodis & Kaplan (2011) summarized the general distinctions between mastery and performance goals. In their synopsis, mastery goals are often associated with adaptive cognitive, affective, and behavioral patterns that may include positive affect and well-being optimism, beliefs in the link between effort and success, high performance, and task-relevant cognitive and metacognitive strategies at a deep level. On the other hand, performance goals are most often associated with surface-level cognitive strategies, negative effects and lower wellbeing, school disruptions, and cheating in school.

Some researchers have disagreed with the labels associated with performance goals and have further delineated performance goal orientation into performance approach and performance avoidance goal orientations. Performance-approach individuals focus attention on the likelihood of success and desire to demonstrate high ability. Performance-avoidance individuals focus their attention on the possibility of failure and attempt to avoid demonstrating low ability (Elliot, 1997). Individuals who exercise performance avoidance are generally associated with low-quality engagement, anxiety, low performance, and low efficacy. Performance-approach individuals are generally viewed positively and associated with such distinctions as high grades, task enjoyment, and self-regulating behaviors (Elliot, 1999). Mastery and performance goals

25

may be pursued synchronously and to varying degrees (Skaalvik, 1997), but Sideridis and Kaplan (2011) concluded that mastery goal orientation generally outweighs performance goal orientation in terms of quality of engagement.

Sideridis and Kaplan (2011) examined effort regulation with different goal orientations and found that individuals with performance-avoidance orientation expended the least amount of effort and persisted least when they failed at task completion. Performance-approach-oriented students exerted effort from the onset of the task but their willingness to persist waned when they failed once and declined even further after a second failure. They found that mastery-goal-oriented individuals expended the most effort from the onset of the task and continued throughout the process. Mastery-oriented individuals tended to use their failure as informative feedback about their efforts and expended even more effort after second attempt at mastery. However, even mastery-oriented individuals lost enthusiasm for achieving their goal after a second failure.

Performance-approach-oriented individuals tend to understand success as an indication of their ability as opposed to mastery-goal-oriented individuals who view and internalize success as an indication they employed correct strategies and effort. Among college students, mastery goals fostered adaptive outcomes in interest whereas performance goals lend themselves to adaptive outcomes in achievement (Barron & Harackiewicz 2000, 2003). Barron and Harackiewicz (2000) concluded that the motivation profile best suited for competitive tasks are individuals high in both mastery and performance goal orientation.

Dweck (1986) posited that students who engage in performance goals generally believe intelligence is stable. Therefore, when they have confidence in their ability, they

can then demonstrate that ability for others even in the face of difficulty or failure. However, when these students are not confident in their ability and are anxious about demonstrating low ability, they use helplessness as a coping mechanism, lack persistence when they fail, or avoid the task altogether.

Performance goal orientation may or may not be related to self-esteem. Grant and Dweck (2003) investigated perseverance in a failure situation with college students and outlined three orientations for performance goals. Those orientations were ability validation, normative comparison, and outcome orientation. The researchers found that only ability validation performance goals were positively linked with a sense of self-worth. They concluded that students who had established mastery goals coped with a failure situation in a positive manner, moved on to future planning, did not lose intrinsic motivation, and did not withdraw time and effort. Students who sought to validate their ability withdrew time and effort and lost intrinsic motivation, but students with normative comparison or outcome validation performance goals did not lose intrinsic motivation or withdraw time and effort.

Age, Gender, and Motivation

MacDonald et al. (2004) reported that females' motivation to participate in physical activity declines as females age, but interests, skills, and confidence develop in primary school. They interviewed 12 families, and concluded that motivation to participate in physical activity is spurred by interests, friendships, safety, and family issues such as income, family configuration, parental work commitments, and transportation. Activity-related self and task perception vary among students as early as

27

kindergarten. Self-concept and subject task value differ as early as first grade. Expectancy-related beliefs and subjective task values are differentiated.

Eccles, Wigfield, Harold, and Blumenfeld (1993) gave questionnaires to 865 first, second, and fourth graders to assess their perceptions of competence in and value of tasks in school and found differences as early as first grade. They attributed part of their findings to the fact that younger participants are generally more optimistic and perceive themselves to have more competence. Males have been found to have more competence beliefs and values for sports and mathematics, whereas females tend have more competence beliefs and values for reading and music. Eccles et al. proposed interest and enjoyment, importance of being good and/or involved in the activity, perceived usefulness, and the cost of engaging with the activity to be the primary factors affecting the motivation of their subjects.

Barkoukis, Ntoumanis, and Thøgersen-Ntoumani (2010) claimed students' motivation to participate in physical activity decreases as students get older. DeBate, Gabriel, Zwald, Huberty, and Zhang (2009) found that females are generally less active than males and that females' physical activity generally declines further as they grow older. The decline in females' physical activity has been attributed to low self-esteem, body image, lack of motivation, lack of enjoyment, lack of interest, the value of physical activity, low athletic competence, and lack of parental and/or peer support. Body image has been linked to both self-esteem and physical activity. Concerns about weight and appearance are also motivators for physical activity. Females who value health and sports are generally more active than those who are not concerned. Debate (2009) suggested that developmentally focused youth sports programs for females should also incorporate

gender-specific life skills such as instruction on bullying, body image, healthy decision making, active listening, and cooperating with peers. Debate recommended that youth sports programs for females focus on a fun atmosphere which does not stress exercise. Their study of Girls on the Run and Girls on Track highlighted gains in females' self-esteem, body size satisfaction, and an increase in physical activity.

No gender differences have been found in the level of expectation among males and females in terms of running although different motives have been noted. Performance goals have been shown to be only beneficial for males. More work avoidance goals were identified with respect to elementary-aged females. Fourth grade male students tend to emphasize performance goals more than females, and females are more likely to score higher on mastery goals than males (Xiang & McBride, 2004).

Fitzgerald, Fitzgerald, and Aherne (2012) investigated the relationship between peer/friend variable and physical activity and found that peer norms impacted the intentions of boys in physical activity but it did not impact the intentions of females. Fitzgerald et al. also found that peer support was associated with higher self-efficacy for overcoming obstacles.

Environmental Factors, Families and Motivation

Huang, Hung, Sharpe, and Jackson, (2010) found that locale, or where students live, plays a role in the amount of physical activity elementary school students are engaged in. Urban students in Taiwan exercised more after school, on weekends, and on holidays and had a higher total amount of physical activity than students in rural areas. Students in rural areas exercised more in summer than urban students and vice versa in the winter months. Urban areas in Taiwan and other countries tend to have more facilities

29

for physical activity. A parent's perception about the neighborhood environment has also been shown to impact physical activity levels. Proximity to play areas, higher ratings on neighborhood aesthetics, lower street connectivity, safety from crime, and availability of walking and cycling facilities all tend to positively impact levels of physical activity for children (Tappe, Glanz, Sallis, Zhou, and Saelens, 2013).

Socioeconomic status tended to affect rural students' participation in physical activity, perhaps because their parents had more knowledge of where facilities were located and how to use them. Western scholars have found that accessibility is associated with student physical activity. Participants who reported lack of parks or sports grounds near their homes took fewer walks and cycling trips. The aesthetic qualities, safety, and convenience also affect the level of physical activity.

MacDonald et al. (2004) concluded that family has a crucial psychological impact on students' participation in physical activity as parents both encourage and model physical activity for participants. Interest, skills, and confidence in physical activity are established within school and family settings in the primary school years. Interests, friendships, safety, income, family configuration, parental work commitments, and transportation are also factors that have been shown to effect the development of physical activity habits in young participants. Complex patterns of family life, priorities, and opportunities are intertwined with social, economic, and cultural capital to shape the habitus of participants at an early age. Single parent and lower socioeconomic families are disadvantaged in supporting participation in organized junior sports. Longer working hours and single parent households also compound the issue. MacDonald et al.

recommended that paid sports clubs and lessons be structured so they allow participation

with minimal expenditures for special clothing or equipment.

Gifford-Smith et al. (2005) synthesized the developmental research on peer group

influence on deviant behavior and surmised that peer relationships often actuate the

growth of problem behavior in youth and that this body of research has consistently

documented a high level of covariance between the peer group and deviant behavior.

However, group influence is not equal for all individuals because the influence is a

complex phenomenon in context and forms both positive and negative effects on

students' behavior (Ellis & Zarbatany 2007).

Teachers, Coaches, and Motivation

Barkoukis, Ntoumanis, and Thøgersen-Ntoumani (2010) asserted that student

achievement can be affected by the motivational climate created by those in positions of

authority. Chambers affirmed that it is important for coaches and instructors to provide

adequate feedback to foster intrinsic motivation. He also believed that the stress

associated with many physical activities can be reduced when fun is incorporated in the

activities. Instructors must recognize individual differences and create challenges based

on those observable needs. According to Vallerand (2000), relatedness (need satisfaction)

may serve an important role in value transmission between coaches and players.

Psychological needs play a critical role in motivation and psychological outcomes.

Persistence

So what is persistence? What encourages some to work volitionally and persist

without the presence of external contingencies? McDougall (1908) defined persistence an

objective feature of purposive behavior, and Ryans (1938) defined it as the amplitude for

a continual release of energy. Hebb (1949) asserted persistence is action directed toward a goal. Feather (1962) defined persistence as the situation in which a person is confronted with a difficult task and is unrestricted by time. Deci (1971) asserted that the amount of time a person is willing to spend working toward a stated goal is a measure of intrinsic motivation.

Grit. Duckworth and Quinn (2008) defined grit as a bilateral construct comprised of both consistency of interest and perseverance of effort that may increase with age and life experience, but stabilizes over time. They found that grit can be reliably measured and validated from research participants to family members and peers. Follow-through, synonymous with grit, was a better indicator of significant achievement than SAT scores or high school rank in the areas of science, art, sports, communications, organization, or other endeavors (Willingham, 1985).

Duckworth, Peterson, Matthews, and Kelly (2007) defined grit as a noncognitive trait that accounts for as much as 4% of the variance of success outcomes in life, including success in academic achievement. Grit, the perseverance and passion for long-term goals, is embodied in individuals who are willing to work strenuously to toward overcoming challenges, sustaining effort and interest over long time periods despite lack of success in the face of adversity, without positive feedback, and with stymied progress. Duckworth et al. distinguished grit from self-control in that grit is defined by consistent goals and interests over years because grit is about long-term stamina versus short-term intensity. They conducted six studies and found that adults with higher levels of education were higher on the grit scale than less-educated adults of the same age. They found that students with grit outperformed their peers with lower grit scores; grit is

related to self-control. However, self-control was not as good a predictor of performance as grit.

Duckworth et al. also concluded that grit accounts for more variance in success than does individual IQ and that grit and IQ are not positively related. Persons with grit generally attain higher levels of education others of the same age and that they make fewer career changes. Participants with higher grit scores earned higher GPAs despite lower SAT scores, and grit was found to be a better predictor success in the first year at West Point than self-control or summary measures of cadet ability. Perseverance and effort were found to be predictors of performance whereas television viewing revealed just the opposite.

Summary

Schools focus most of their attention on academic achievement, and this is often undertaken without regard for the brain-body connection. It is important to recognize the brain-body connection in the school setting, not only to optimize learning, but also because schools may be an ideal place to implement intervention programs to combat childhood obesity. Environmental factors, coaches, and families all play an important role in helping students establish exercise habits in the primary years and beyond. Implementing programs to optimize the brain-body connection and combat childhood obesity is difficult to accomplish as various factors will affect motivation to participate. Males and females have natural differences in their intrinsic motivation and motivation tends to decline in both groups as they age. Program coordinators must consider performance and mastery goals because of the different ways those objectives are perceived by females and males.

This chapter reviewed the relevant literature focusing on elements of persistence among elementary age participants in voluntary sports programs. Chapter 3 will detail the methodology chosen to collect and analyze data, describe the context and participants for the study, and present any ethical concerns and study limitations.

CHAPTER 3: RESEARCH METHODOLOGY

Research Design and Rationale

This study was intended to address the following questions: a) How do elementary students in a voluntary before-school physical activity program perceive relationship indicators which impact program persistence, and b) How does parental, teacher, and peer involvement impact the program persistence of elementary-level students in a voluntary before-school physical activity intervention? The central phenomenon under investigation in this study was how relationships affect persistence using an evaluative case study. This evaluative case study allowed me to closely examine information about the intervention to produce judgments about its effectiveness, explain causal links between the intervention and real life at the research site, describe the real-life context of the intervention, and deeply explore this intervention that has produced multiple outcomes.

I served as an observer, a participant and a supervisor for ING RFSB at Pleasant Elementary for four consecutive years. I am also an administrator at this same site, and the students view me as a school leader and a disciplinarian as well. With ING RFSB, I attempt to be a coach and a friend for morning intervention but the demarcation between the two roles is often blurred. Other than my role as a coach for the ING intervention and as an administrator at Pleasant Elementary, I do not have any personal relationships with any of the participants in the study. The teachers involved in this study understand that I

coordinate the ING intervention as my morning duty assignment but they see me as a supervisor of the daily operations of the school building.

Having such a vested interest in the success of the program lends itself to certain biases. After four years of work with the intervention program, I wanted the program to succeed. Therefore, I had to be careful not to allow my own vested interest in the intervention direct me toward data that supported my preconceived notions about the success of the intervention.

Even though I would no longer be an administrator at this research site next year, I wanted to leave behind recommendations, whether positive or negative, for the program to continue and grow long after my departure. I managed my personal biases by taking this in-depth examination of the program. I also chose not to interview every participant in the study. A colleague that I worked closely with asked some participants the interview questions as I felt we would get more honest answers without my presence. Particularly with students who I felt had connected with me more than they had connected with the goal and objectives of the program, I wanted to be able to analyze their responses without me present. I did interview each parent and each teacher in the study since I had not worked with either of them very closely during the implementation of this intervention.

Other than actively working as a supervisor in the research site, there were few other ethical issues to consider during the project. I did not offer or provide any incentives for participating in the interviews. The interviews took place during the same time period that information was being given to students about the final 5K race for the school year. Interview participants received the same paperwork and were required to pay the same price as any other ING participants or nonparticipant. I avoided any conflict of

interest by holding all interviews either before or after school. No one was asked to arrive or leave class or their place of employment to be part of this research project.

For the first two years of the intervention, I had two assistants, the physical education teacher and an instructional assistant. In the third year, we did not apply for funding and decided to discontinue the program. After much deliberation, though, I decided that the program needed to continue after many students and parents continued to express an interest in the program. That year, I supervised the program alone since student supervision assignments had already been established. This year, I supervised the program alone again and attempted to some create strategies to increase safety and continue to provide adequate supervision.

During the first week of the program this year, I took attendance as students entered the multipurpose room, and then lead the whole group in stretching exercises before we went outside to a small track. Once we were outside, I counted students off into groups of 10 or fewer and had them begin to make a few laps around the track. I assigned a pace setter for the group, which was someone I felt could keep the group moving at an appropriate pace. Nevertheless, students argued about who should be the pace setter and many ran past this person to prove they were faster. This new arrangement defeated the purpose of the program, and I was not pleased with the level of synergy among the participants. Students expressed little concern for others in their small groups and raced around the track with little regard for other members of the group. The method proved ineffective for me because I could not be stationary and manage arbitrary groups of students while actively supervising or coaching students who were already jogging around the track. We were losing valuable time since many students arrived at

school on buses at 6:50 a.m. and were coming directly to the multipurpose room. I needed to have students check in, warm up, and have time to complete a run by 7:20 a.m. so they would have time to eat breakfast if they desired to do so and be ready for the day by 7:35 a.m. In essence, we had 30 minutes each morning dedicated to ING RFSB.

In Weeks 2 and 3 of the program this year, I made a significant change to the structure of ING RFSB to maximize efficiency, improve supervision, and increase accountability. I created seven smaller groups of students and assigned a group leader to each group. When students entered the multipurpose room, their names had been written on cardstock underneath the group leader's name, which was in big red letters. I explained the new expectation—the group leader would be responsible for leading the morning warm-up activities and keeping the group together as a single unit when on the track. During our first time outside working under this new system, there was still some confusion about the nature of ING RFSB and I explained to students again the purpose of our program was to build endurance and that competition was not a program objective. I explained that improvement and fitness were the main goals. On the third day of this format, the atmosphere of the program was much better organized. Most students understood the goal and were willing to run as a group. I informed students that there would be a prize at the end of the morning for the group that completed the most laps while staying together and keeping everyone encouraged and involved. On that morning, an outstanding group emerged and was rewarded with pairs of orange shoelaces, a trademark of ING RFSB. I thought we were set to move forward for the remainder of the fall as students appeared to be enjoying themselves and working harder to reach their

38

goals. But as I looked more closely, the number of students who were showing up consistently each morning for the program began to dwindle just like it had in the past.

The phenomenon I sought to investigate were the relationship factors that influenced grit, perseverance and passion for long-term goal attainment in this culture of rural elementary school students enrolled in the before-school running program. Drawing on some tenets of ethnography, this is a qualitative study using individual interviews to address the questions: What relational aspects are present in the lives of students who participate in ING RFSB that encourage participants to persist for the duration of the program? What insights may be gained to lead to more effective implementation of this program over an eight-week period to encourage student perseverance?

Participants

Sixty-eight fourth and fifth grade students between the ages of nine and eleven, 44 males and 24 females, returned permission forms to participate in the ING RFSB program in the fall of 2014. The 68 males and females who signed up to participate represented 38% of the population in fourth and fifth grade. The 44 males represented 44% of the males enrolled in fourth and fifth grade, and the 24 females represented 29% of all the females available to participate in the program.

Pleasant Elementary is located in a rural, low socioeconomic area of South Carolina where 82% of the students receive subsidized meals. Pleasant Elementary is one of 16 elementary schools in the school district that serves more than 24,000 students from prekindergarten to Grade 12. The district has more than 3,550 employees. The district covers 360 square miles and occupies 48% of the county's 750 square miles and is one of the county's major employers. 2010 Census Data showed that the county's population as

262,391 and the area that makes up the district population as 121,030 or 46% of the county.

During the past 10 years (2003–2013), the school district grew by an average of 511 new students per year. The district remains one of the fastest growing school districts in the state, ranking eighth in the state on the 2012–2013 135-day count released by the S.C. Department of Education. Therefore, the district has built 10 new schools since 2003.

In the fall of 2013, Caucasian students represented 81% of the student population in Grades 4 and 5, African Americans represented 7% of the population, and Latino students represented 8% of the population in those grade levels. The ING RFSB participants represented the entire student population with both subsidized and full pay students, special education and gifted students, and Caucasian, African American, Latino and other races represented. The majority of students use the district transportation to and from school each day, which is the main reason the intervention was offered in the mornings as opposed to after school. As part of the organizing team, we felt that students who needed the intervention would be limited to whether or not a parent was available to pick them up from school and we decided to eliminate this concern for them.

 I gained entry into the world of the ING participants as an assistant principal in the elementary school they attend and as the program coordinator. I have been coordinating the program at Promising Elementary for the past four years.

Males. Thirty-six of the 44 males who joined ING RFSB in the fall were Caucasian, five were Latino, three were African American, and one was of Middle Eastern descent. Reflective of the socioeconomic status of the school, males in the

program range from full-pay to free lunch status, although the majority of them receive free lunch. Some of the males play sports outside of school but most did not.

        Females. The *24* females who joined ING *RFSB* in the fall, like the males, reflect the socioeconomic status of the school population. Twenty-one females were *Caucasian*, one was *African American*, one was Latino, and one identified as "other." Most of the females were not engaged in organized sports outside of school.

Context of Study

        Pleasant Elementary attendance lines are much broader than the town, which, at the time of the 2010 census, had 553 people, 192 households, and 147 families there. The population density was 159.7 people per square mile with 211 housing units at an average density of 60.9 per square mile. The racial makeup of the town was 96.75% Caucasian, 0.72% African American, 0.18% Native American, 0.90% Asian, 0.54% from other races, and 0.90% from two or more races. Hispanic or Latino of any race was 2.17% of the population.

        In 2010, there were 192 households out of which 42.2% included participants under the age of 18 living with them, 66.1% were married couples living together, 7.8% had a female householder with no husband present, and 23.4% were non-families. 20.3% of all households were made up of individuals and 9.4% had someone living alone who was 65 years of age or older. The average household size was 2.69 and the average family size was 3.14.

        The population of Pleasant was spread out with 27.5% under the age of 18, 8.3% from 18 to 24, 28.8% from 25 to 44, 21.9% from 45 to 64, and 13.6% who were 65 years

of age or older. The median age was 35 years. For every 100 females there were 84.9 males. For every 100 females age 18 and over, there were 81.4 males.

The median income for a household in the town was $42,222, and the median income for a family was $47,917. Males had a median income of $31,696 versus $25,769 for females. The per capita income for the town was $14,838. About 6.1% of families and 12.1% of the population were below the poverty line, including 7.9% of residents under age 18 and 17.5% of residents age 65 or over.

Pleasant Elementary School. Pleasant Elementary serves 638 students in *G*rades *p*reK-5. In kindergarten through fifth grade, there are four teachers in each grade level. Pleasant Elementary is a Leader in Me school as designated by the Franklin Covey Foundation*,* which means the school has adopted the Seven Habits of Highly Effective People*/*Participants as its school wide leadership curriculum. Each classroom has a mission and vision statement posted by the classroom door and the statement is recited by the participants each morning before the school day begins. Students apply for and carry out various leadership roles in the school each day. They greet the car riders each morning, the*y* lead the lines of bus riders, they wear button up shirts and ties to greet visitors and substitutes who arrive before the start of the school day, *and* they are photographers, announcers, and leaders in every way.

The school itself is neatly divided into two parts. Several years ago, due to overcrowding, the school added two additional wings. Those additions to the building look much newer than the older building and currently house all the kindergarten, first grade, second grade, and self-contained special education classes. You must enter through big blue doors, held open by magnets, under inspiring leadership quotes, to enter

that part of the building. Student writing and artwork adorns the spacious, well-lit hallways and the terrazzo floors with their colorful patterns and designs create the feel of an ideal learning environment for participants in kindergarten through second grade.

The main entrance to the school opens directly to the front office where the doors are always propped open. The inscription across the doorway reads "City of Opportunity" and a fierce-looking panther is centered where the two doors leading to the front office would come together when they close. One double-door cafeteria access is to the left but the doors remain locked for security reasons. To the right are community restrooms that, upon entry, give an indication to the age of this part of the building. Built in the 1970s, this part of the building has a bit of a brown timbre to it. All the classroom doors are brown and they match the brown speckled terrazzo floors. There is adequate classroom and office space to house the nearly 100 employees and the 700 students who attend the school daily. The average class size in for core subjects is 14 to one.

For the past five years, the school has received an "average" report card rating. The attendance rate for the 2012-13 school years was 94.6%, slightly below the median school like Pleasant Elementary with 96.3%. Eighty five percent of teachers from the previous year returned, and the principal has been in the post for nine years. Although Pleasant Elementary is located in a rural, low socioeconomic part of the county and school district, the school district is 49th out of 85 school districts in the South Carolina in wealth per pupil.

ING Run for Something Better. ING *RFSB* has been a part of Pleasant Elementary for four years. We spread the word about the program by sending an informational letter and parental consent form with all fourth and fifth grade students.

Sixty-eight students returned permission forms to participate, and they range in age from 9 to 11 years old.

From the onset, the program has held running sessions on Mondays, Wednesdays and Fridays each week during the fall and added a less organized version each spring. Students met in the multipurpose room, a quasi-gymnasium, when they arrived at school. Some students arrived as early as 6:45 a.m. and were given until 7:20 a.m. to complete their work out and go to breakfast. Students who choose not to eat breakfast went directly to their classrooms, but, for the most part, all students leave the multipurpose room together and re-enter the building together. Logistically, this became the only feasible way to manage the program with one supervisor. In the fall of 2013, after organizing the student into small groups for accountability, some students were allowed to remain outside longer if they arrived late since I could gradually release students from the outside running area into the building without my direct supervision. At the building reentry point, three adults are positioned so they can see and hear the groups' activities until they reach their classrooms or the cafeteria.

For the past two years, we have operated the program at Pleasant Elementary without the aid of the grant funds. This removed the stipulation that there be pre and posttest data released to the NASPE, and we were not required to host a culminating event. In 2012, we did not host a culminating event and saw attendance wane at the start of the spring semesters. This year, we determined to allow the November run to serve as our culminating event for the fall, and we would have a culminating event in the spring as well. The spring culminating event would be a 5K race, the Run for Hope, held each year to raise money for cancer research in honor of one our teacher's late husbands.

Throughout the program, we have had special guests come speak with the participants about their running progress, staying healthy, and setting goals. We used Skype to connect with a former Boston Marathon winner before we competed in the Governor's Cup Road Race in 2011. In the spring of 2014, another Boston Marathon participant spoke to the group about the 2013 Boston Marathon and answered questions about attire, energy, perseverance, and how the bombing affected the race.

Multipurpose room. Any student who rode a nonspecialized bus to Pleasant Elementary walked past the multipurpose *room* when they entered the building each morning, and because of this convenient arrangement, students who rode the bus were presented with the choice whether to enter for the running program or keep walking every Monday, Wednesday and Friday morning. Car riders could simply avoid the multipurpose room altogether since they entered through the front entrance of the school. The multipurpose room at Pleasant Elementary School was the location where students met so I could record attendance and where they could stretch and warm up before their morning run. The room was built in 2008 with carpeted floors, six basketball goals, a pull-up bar, restrooms, and large air conditioning ducts overhead. As you entered through a small corridor, there were two restrooms on each side and two water fountains. The physical education teacher had prominently displayed, "Without self-discipline, success is impossible" at the entrance, and ING RFSB adopted this quote as our group mantra.

The floor in the multipurpose room was carpeted and all around the room there were pictures of yellow figures on blue backgrounds performing all types of exercises. On some mornings, while waiting until 7:05 to go outside, I asked the participants to move from one stretching/exercise model to another model and I used a whistle to signal

them when to switch after 60 seconds at a station. On other mornings, we played basketball or watched videos of runners to form a mental picture of what it meant to run as a group and to use proper running form.

There was a large radio by the coach's office which I often used to play rhythmic music as participants entered the multipurpose room each morning. There was a fading gray line of duct tape on the floor that extended from the entrance to the opposite wall that splits the multipurpose room into two halves. There were other positive notes and phrases posted around the room that students wrote to show their appreciation and admiration for the physical education teacher and positive quotes the physical education teacher posted on the walls and doors. The multipurpose room was where students received their weekly physical education instruction, and it is the location where high school coaches and other special guests visited with the runners throughout the program.

The participants usually entered happily and energetically. Sometimes it was unclear if they were focused on running or if they were happy to avoid silent reading in the hallways before the school day began. Left alone, the males tended to chase each other, compete on the pull-up bar, play dodge ball and joke around with each other. The females usually entered more quietly and gravitated toward each other. They either talked quietly or sat and waited for the designated time to go outside. The female students were much easier to manage.

Running track. The running track was a large, unpaved grass and sand-covered area located outside the fourth and fifth grade hallway doors so students in the hallways who were reading silently could see us running each morning. For the most part, the track is all grass except for one area at the on the south turn where the grass has been

annihilated and only sand remains. One portable classroom remained situated near the center of the designated running track. The playground was located on the east side of the running track along with a rectangular-shaped blacktop area for playing basketball. In the far distance, a rarely used baseball field was enclosed with a fence. On the south side of the running track was a dirt trail that cars often used to exit our campus after dropping off students each morning. Without lighting, this area could be hazardous for the participants, especially when visitors drove carelessly. For this reason, the running lane was marked with orange paint and large colored cones that kept participants about 20 yards from any vehicles. The west side of the track bordered a parking lot that was adjacent to the multipurpose room where the fourth and fifth grade teachers generally park their vehicles.

At 7:00 each morning, running track was barely visible, particularly in late fall and early winter. The springtime was much better after the change to Daylight Savings Time. The adjacent parking lot was always lit and provided some light on one side of the track, and we had light shining from the doors of the fourth grade hallways. Participants seemed enthralled with the sunrises they are afforded as the sun rises over the building each morning. Oftentimes, the sky becomes a bright pink and it colors the clouds and tests the students' memories from science classes.

The track was marked with orange paint lines and the circumference measured approximately 14/100 of a mile. Participants knew that seven laps around the small track was equivalent to a full mile. Dew and rain often erased the painted lines, but the participants had created a well-worn path that they had learned to follow. During Week 5, to assist the small groups in monitoring their progress each morning, the group leader

received a Popsicle stick each time she and the group completed a lap around the track with a goal of accumulating seven Popsicle sticks before time to go inside.

  Cafeteria. The cafeteria was where most of the ING RFSB participants recuperated each morning before going on to class. I encouraged students not to eat breakfast at school before going out to run so they could avoid becoming ill. I encouraged participants to eat at home if they had a long bus ride to school. After running each morning, any student who has not eaten could go into the cafeteria to eat. Pleasant Elementary had a very large cafeteria which appeared even larger due to a stage area inside. The stage area doubled as the school gymnasium where participants had physical education classes for a number of years until the multipurpose room was built in 2008. With the stage curtains open, 40 chess boards covered several tables as this was the meeting area for the chess academy which met on Tuesday and Thursday morning. Incidentally, many of the same students participated in both the ING RFSB and the chess academy each week.

  The eating space in the cafeteria was arranged with eight parallel rows of rectangular shaped tables butted end to end that seated about 50 students each. When ING RFSB students arrived on Monday, Wednesday and Friday mornings, most other students had left to be in class by 7:30 a.m. ING RFSB participants generally sat together at one table and had about ten minutes to eat their breakfast. The stated expectation was that no one was allowed to be late to class. If a teacher informed me that a student had come to class tardy from the ING RFSB, the student was not allowed to participate at the next meeting.

As students ate, musical selections played from a large stereo system that was visible on the left side of the stage area by the South Carolina flag. Pleasant Elementary played classical and jazz music in the cafeteria during lunch and breakfast. Each musical selection was followed by five minutes of silence during which, students could have conversations using their inside voice level. I only used the music in the cafeteria to keep ING RFSB students mindful of the time they had remaining before being late class, but the no-talking rule generally did not apply. The ING RFSB participants seemed to connect with each other during the short breakfast time and talked about the day ahead of them or other activities. ING RFSB participants generally had time to talk a little and listen to two musical selections before it was time to leave for classes that began each morning at 7:40 a.m.

Data-Gathering Methods

Observations. I kept a notebook to record observations and process notes throughout the course of the intervention program. The notebook included comments and various changes that needed to be made we progressed through the fall and spring intervention sessions. I recorded student reactions to the changes I made and noted how students interacted with each other in their respective groups. I also recorded statements and concerns students brought to my attention about the program as the program moved forward. I noted how I felt students were progressing toward the goal of completing the one-mile race in fall and the three-mile race in the spring. In the weeks leading up our fall culminating event, the Pleasant Christmas Parade, I monitored the participants' running form and breathing techniques and whether they had internalized any of the strategies they had learned throughout the program. For example, because of their competitive

49

nature many of the male participants continuously raced from the start of the morning run and exhausted themselves before completing a full lap around the track. For a week in December, we focused on beginning with the end in mind, one of the seven leadership habits student were learning as part of the leadership curriculum in the school.

Participant interviews. I distributed envelopes containing a consent form for parent participation, a consent form for student participation, and an assent form for the minor to the teachers of each ING RFSB better participant in fourth and fifth grade. The envelopes were sealed with a label that read, "Please read carefully," and I asked teachers to explain to students they could return the forms to the front office once a parent or guardian had read the contents.

I divided the complete list of participant into three groups. Group A had consistent participation in the both the fall in the spring having attended at least 90% of the scheduled running sessions (22 of 29) in the fall. Group B had mediocre participation having attended between 40 and 60% of scheduled meeting for the eight-week meeting period (10-14 meetings). Group C had participated in less than 40% of scheduled morning meetings. I collected consent and permission forms until I had two interviewees from each group. Several students identified in Group A returned permission forms before any of the other participants so I decided to include the first two students from each group who returned their consent forms. To avoid any bias in the process, I dated the forms as they were returned.

I received 18 consent and assent forms from ING RFSB participants. Once I selected the six students participants to be interviewed, I called each of the parents to thank them for their willingness to participate and for signing the consent form and

scheduled interviews. In two cases, I was able to schedule interviews with the parent and the child since they had both agreed to participate. In one instance, only the parent agreed to participate and she was contacted as well. Three parents granted consent to participate in the research, and those parents represented each of the participants in each of the three groups. Five teachers consented to an interview, and I selected the first two from each grade level. I scheduled all interviews either before or after school hours depending on the availability of the participant.

Initially, the school psychologist was present for the student interviews to serve as a witness. I was advised by the school district to include a second adult in the interview process. Initially, she sat quietly on one side of the table while I conducted the interviews with the student participants. We discussed the results of the first two interviews and felt that some students might have been more open about to sharing their feelings about the program if she asked some of the questions since she was not connected with the program. I informed the parents of this change for the last four interviews.

The school psychologist was not present for any of the parent or teacher interviews. When participants entered the interview area, which was either the professional development library at Pleasant Elementary School, an administrative office, or a different office in the primary wing of the building, he or she was asked have a seat and take a few deep breaths. I thanked each participant for her willingness to participate in the study and told each to relax and that I would begin the interview when they were ready. Each interview lasted about 30 minutes.

Organization of data. Each interview was recorded using the recording function of an iPad or iPhone. The devices were turned face-down on the table during each

51

interview so only the audio function was in use. After each interview, I saved the interviews to an 8GB memory card.

Following each interview, I transcribed the interview responses to each interview question onto separate notecards and highlighted key phrases and themes that emerged. I listed the key themes from the participant, teacher, and parent interviews into columns on a Word chart and highlighted consistent themes and ideas across the three sets of interviews to draw conclusions about ING RFSB in the fall of 2013. Each interview was analyzed and coded on the same day it was conducted.

Data analysis. I scripted the response to each interview questions. I began by students' interview responses and observational data to develop research themes from which I can ask additional follow-up questions and draw conclusions. I constructed a matrix to identify patterns, paradoxes, and trends in the data.

Trustworthiness and member checking. I achieved validation of the data and triangulation by examining the same questions asked of the three groups of participants against what I had observed previously and against what I had already learned from the pilot study.

Subjectivity/Positionality. Admittedly, I care deeply about the success of the program at Pleasant Elementary. I drafted, submitted, and managed the original $2,000 grant that introduced ING RFSB to Pleasant Elementary and this community. The intervention has been well received by students and other stakeholders, and the program has involved many students who would not have otherwise had an opportunity to participate in an extracurricular activity at the school. To date, we are the only school in the school district that received the ING RFSB award money, and we accomplished it in

consecutive years. Both times we received the grant; we were selected as one of 50 schools nationwide.

In relation to the participants, I have been an administrator at Pleasant Elementary for nearly eight years. I have developed sound professional relationships with the student, staff, and community members. I am a frequent visitor in classrooms performing observation, reading aloud to students, and performing various other administrative functions. Coordinating ING Run for Something Better has expanded my administrative role because it afforded me the opportunity to coach and inspire students on a more personal level while maintaining my responsibilities as an instructional leader, disciplinarian, and safety coordinator.

Ethical issues. The ethical issues I encountered during this study mainly centered around time. I had to balance my time in the mornings between organizing this program and fulfilling my administrative responsibilities. I justified my involvement with this intervention as morning supervision assignment because I supervised such a large number of students each morning that it lessened the supervisory responsibilities for the fourth and fifth grade teachers who served in a various supervisory roles each morning. I made adjustments for the time taken away from routine responsibilities by arriving at work earlier to address routine tasks so they do not interfere with my dedicated half hour each morning with the runners, and I was rarely interrupted.

Another ethical consideration was the obligation students may have felt to participate in the interviews. I gleaned from the pilot study that the opportunity to socialize with friends in the mornings before school was a powerful impetus to join and remain part of the intervention. I did my personal best to ensure that students were not

pressured into participating in the interview. I reminded them at the start of each interview that there were no repercussions or rewards for participation. This was the determining factor for deciding to have the school psychologist assist me during some of the participant interviews.

Limitations/Considerations

I was somewhat limited in my ability to gain an unbiased analysis of the program. As a participant observer, with the exception of one instance, I had been the only adult supervising the program for the eight weeks in the fall and the eight weeks in the spring. At the time of these interviews were conducted, I had organized and accompanied the group on three field experiences and had another one planned for the following month. I had connected with parents about issues other than discipline or academics and had formed congenial relationships with most of them as we met at different location on Saturday mornings for the field experiences.

This study was limited by the overall structure of the program. Balancing the supervisory and the participant observer roles was difficult. Capturing what nuances of the program each morning had to be done in a sensible manner so as not to compromise the safety of all participants. Supervision was even more of a concern with the size of the running track in the fall of 2013. With consistent participation of at least 40 participants in such a small running area, it was difficult to visually separate the groups sometimes, which made it difficult to distinguish which groups are performing and working together as I have instructed. Finally, all this was taking place in limited timeframe each morning due to transportation restrictions limited most students to morning hours only.

The perspective of two groups of students was not included in this research. There are no Latino students, male or female, and there were no Black males interviewed for the current study. Although the representation from these two groups was small at the research site, the two groups were consistent in their attendance at each meeting. I believe it is worth noting that no participant from either of these two groups completed a 5k in spring 2014.

Summary

My methodological stance was that the preadolescent youth at Pleasant Elementary could provide insight into the relationships they need present in their lives that would assist adults who attempted to facilitate better implementation of ING RFSB and other interventions designed engage them in rigorous physical fitness activities and other wellness pursuits. Therefore, I focused this research study on the individual participant, the parents, and the teachers through interviews and participant observations to help tell the story of this experience.

Observational data was collected from September 2013 through November 2013. I conducted the interviews in March 2014, which coincided with the final weeks of the program. At the time of the interviews, students had the opportunity to reflect on the entirety of the intervention–from the time they began in September 2013, through the sporadic winter months, and as they prepared for the final 5K May 2014.

ING RFSB sought to address a localized problem of sedentary behavior among fourth and fifth grade students at Pleasant Elementary School. This research sought to understand how elementary students in a ING RFSB perceived relationship indicators which impacted their persistence in the program and how parental, teacher, and peer

involvement impact their persistence. Chapter 4 will present the analysis of data, and

Chapter 5 will address the research questions, discuss the implications for practice and

offer recommendations for future research.

CHAPTER 4: ANALYSIS OF DATA

The purpose of this research was to better understand student persistence in ING RFSB at Pleasant Elementary School. I sought to answer the questions a) How do elementary students in a voluntary before-school physical activity program perceive relationship indicators which impact program persistence, and b) How does parental, teacher, and peer involvement impact program persistence of elementary level students in a voluntary before-school physical activity intervention? The purpose of the study was to delineate the relationship factors that positively and negatively affect student persistence in ING RFSB at Pleasant Elementary.

Pilot Study

Observations from focus group interviews and artifacts from a 2010 pilot study revealed that most participants wanted to have fun in the program and be with their friends. This deeper investigation further examines the relationships students have formed inside and outside the school context that affect their level of persistence with the ING RFSB intervention.

The pilot study was conducted at the conclusion of the first year of implementing this intervention program at Pleasant Elementary. As a prerequisite for the grant, we were required to host a culminating event at the conclusion of the eight-week running program and submit pre and posttest data to the NASPE. In addition to those requirements, we also chose to submit artifacts in the form of essays students wrote about the intervention when the program ended in the fall. For the pilot study, I analyzed the responses to the

essays entitled "What ING Run for Something Better Meant to Me" and concluded that

the general consensus for participating in the intervention was to be with friends and

enjoy the excitement of the field experiences. The influence of the pilot study on the

current study may have been a preconceived expectation of seeing more of the same

results as I interviewed parents, teachers, and students about the ING RFSB experience in

the fall of 2013.

This research was intended to take a closer examination of those friendships and other

relationships in the lives of the participants that both positively and negatively affect their

persistence in ING RFSB in the fall of 2013 and to better understand how participants

perceive those relationship indicators that affect persistence.

Setting

The setting of this study was different from the setting of the pilot study. The pilot

study was conducted in the first year of the intervention when there were generally three

or adults to supervise the group of participants each day. There were two adult males, the

physical education teacher and I, and a female instructional assistant. There were at least

two of us present at all times, which increased active supervision and engagement with

participants. Recording attendance, participation, effort, and behavior were managed by

the three-member team. However, in the fall of 2013, there was only one adult managing

essentially the same number of participants as there were in the first year of the

intervention. The female instructional assistant was no longer employed at Pleasant

Elementary, and the physical education teacher has been assigned other morning

responsibilities that limited his involvement with the program. He was only available as a

substitute in my absence on one occasion. We conducted the interviews the week

following the March 5K, the first of two 5Ks for ING RFSB in the spring of 2014. Sixteen ING RFSB participants completed the March 5K, and eight of those students were represented in this analysis either through a direct interview, a teacher interview, a parent interview or a combination of these. We interviewed six ING RFSB participants. Of the eight students represented, three completed the March 5K. Two participants completed March 5K but did not consent to be interviewed; both their parents were interviewed. Three participants completed the 5K, returned consent forms, but were not selected for an interview. There was one instance where both the parent and child completed the interview and the child had completed the March 5K. The other participants represented in this analysis were ING RFSB participants who did not complete the 5K.

Another consideration was the timeframe for the interviews in this study. I conducted the interviews during Measures of Academic Progress (MAP) testing at Pleasant Elementary in the spring of 2014. After the fall MAP assessment students and their teachers worked together to establish a target score for the spring, which was viewed as a representation of their academic progress for the school year. These goals were written, kept in the teacher's data notebook, and revisited often with the students throughout the school year. These goals were communicated to parents during a parent-teacher conference in the fall. Students at Pleasant Elementary had taken a winter version of the same assessment to monitor how they were progressing toward their yearly goals. It was likely that any conversation about the goals of ING RFSB were overshadowed by emotion of anticipation, the celebrations, and the frustrations of learning about the results of the spring MAP assessment.

One final consideration for the study was the family influence that may have affected participation in the March 5K. For the one-mile runs in the fall of 2013, I included the cost of bus transportation to and from the events and assumed the responsibility of supervision. Even though parents were charged the fee for their children to participate, there was no obligation on their part except to leave the participants at the school on the Saturday morning before the run and to meet them at the school after each event. The March 5K was different since the event was held in the town of Pleasant and there was no need to provide transportation. The start of the race was less than one mile from the school. I did not collect any funds to participate in the event as parents were instructed to either register for the event online or register on the morning of the event. Since the parents brought their children to the event, I asked each parent to stay for the duration of the race. The time commitment from the parents/guardians, coupled with damp, cool weather may have affected participation at the race. Sixteen ING RFSB participants attended, and many of their parents participated in the event alongside them.

Data Collection

We interviewed six students, three females and three males, in this study. Two students, one male and one female, had participated consistently, having attended at least 90% of scheduled meetings in the fall, had continued consistent participation in the spring, and had completed the March 5K. Two students, one male and one female, had attended 40-60% of meetings in the fall, had continued the same pattern in the spring and had completed the March 5K. Two students, one male and one female, had inconsistent participation in the fall having attended less than 40% of scheduled meetings, had

continued the same participation pattern in the spring and did not attend the 5K in the spring.

I interviewed the three mothers of ING RFSB participants who granted consent for an interview. One parent was the mother of a student who had consistent participation in the fall and spring and who had completed the March 5k. This parent completed the 5K with her child, but did not consent for her child to be interviewed. The second parent was the mother of a student who had consistent participation with ING RFSB in the fall and spring, but did not attend the March 5K. Her child was interviewed for this study. The third parent was the mother of a participant who attended between 40 and 60% of meetings in the fall (Group B), had continued the same attendance pattern in the spring and did not attend the March 5K. She did not consent for her child to be interviewed. Table 4.1 depicts the parent who were interviewed and how they relate to the current investigation.

Table 4.1 Characteristics of Interviewees

	Parent 1	Parent 2	Parent 3
Consistent participation	✓	✓	No
Attended 5K	✓	No	No
Child interviewed	No	✓	No

I interviewed four teachers, two from fourth grade and two from fifth grade. I asked teachers to select an ING RFSB participant in his or her class to answer questions about during the interview. I did not inform them of which students in their classes were part of the investigation. One fourth grade teacher discussed a female student with consistent participation in both fall and spring who had completed the March 5K in the spring and who was interviewed as part of this study. One fourth grade teacher chose to

focus on a male student with consistent participation, who had completed the March 5K and whose mother had consented to be interviewed. One fifth grade teacher discussed a male student with consistent participation in fall and spring who had completed the March 5K and whose mother had consented to an interview. The second fifth grade teacher discussed a female participant who had inconsistent participation in the fall and spring, had continued the same participation pattern in the spring, had not completed the 5k, and was interviewed for this study. Table 4.2 summarizes who each of the teachers discussed during their interviews.

Table 4.2 Characteristics of Participants Teacher Discussed During Interviews

	Teacher 1	Teacher 2	Teacher 3	Teacher 4
Male		✓	✓	
Female	✓			✓
Consistent	✓	✓	✓	No
Attended 5K	✓	✓	✓	No
Student Interviewed	✓			✓
Parent Interviewed	✓	✓	✓	No

We conducted interviews in three locations: a) the professional development library of the media center, b) an administrative office at the research site, and c) the school psychologist's office. Each interview lasted no longer than 30 minutes. The interviews were recorded using the video function of an iPhone or and iPad device. I had planned to conduct each interview and have the school psychologist serve as a witness. I adjusted the plan after realizing that, in a few cases, having the school psychologist ask some questions was a better option because of the relationships I had formed with some students as the facilitator of the program. The school psychologist conducted four student interviews to help eliminate this bias while I served as witness.

In the spring semester of 2014, there were several days when weather conditions were unfavorable and we could not to go outside and run. On the days when the ING RFSB met, I recorded attendance but it was difficult to communicate with students whether we would or would not have a session. During this time, students never found out whether we were going outside until the Monday, Wednesday and Friday mornings when they arrived at school. I believe this affected car riders more than it affected students who rode buses. I believe this also affected students' enthusiasm for attending the program when we returned from winter break until the weather conditions were more favorable and allowed us to meet with more consistency.

During interviews, there were three occasions when the interviews were interrupted by either afternoon or morning announcements. Other than those minor interruptions, there were no other unusual circumstances encountered during data collection.

Data Analysis

I developed separate sets of questions for the ING RFSB participants, the teachers, and the parents and separated the questions into nine broad categories: a) feelings about ING, b) adult relationships and ING, c) other programs/activities, d) quitting ING RFSB, e) quitting other activities, f) commitment/support and parental commitment, g) academic challenges/commitment, h) parent-teacher relationships, and i) goals. Each questioning category was represented in each set of questions for the purpose of triangulation and validity.

After each interview, I highlighted key phrases, ideas, and themes that I listened for in subsequent interviews and checked against findings from previous interviews.

Once the interviews were completed, I listed all the elements from each group, created a chart with the commonalities from each interview, and analyzed the chart for consistent themes across all three groups. There were three consistent themes across all three sets of interviews: a) self-determination, b) self-awareness, and c) the importance of goal-setting. Each column in Table 4.3 lists the major themes that emerged from the parent, teacher and student interviews. Self-determination and not quitting, listed in in column one, were combined into one theme: self-determination.

Table 4.3 Major Interview Themes

	Parents	Teachers	Students
1.	Friends in the program	MAP goals	Enjoyment
2.	Friends outside of school and in other activities	Consistency	Self-awareness/efficacy
3.	No quit rule	Follow-through	No consideration of quitting
4.	Someone to look up to	Students' self-awareness/efficacy	Admiring others' effort
5.	Ambiguous ING goals clear MAP goals	Family bonds	Understanding their own motivation
6.	Causes/Benefits	Friendships in ING	Adult approval
7.	Determination	Relationships with peers	Comparing 1 mile to 5k
8.			Parent influence (support)
9.			Vague ING goals

Self-Determination

"That's *it* momma! I'm gonna do the whole thing if it kills me." This quote epitomized the spirit with which the students engaged in the March ING RFSB 5K and the daily running intervention, and it highlights how the parents and teachers consistently viewed their children (in the case of the parents) and the participants (in the case of the teachers). Webster's New World Collegiate Dictionary defines determination as the quality of being resolute; firmness of purpose. I discovered numerous examples of this character trait as I analyzed the interviews. The quote I used to begin this section was excerpted from an interview with one mother as she described her child's level of self-

determination to complete the 5K once he had begun. The participant had gotten very tired and the police escorts present at the race had offered him a ride and this was his response. There were several other quotes which accentuated the same quality:

"I think he puts too much pressure on himself." [parent]

"He came to me with the idea of joining the running club." [parent]

"He wants to do his best at whatever he does…classwork, MAP test, he sets goals."[teacher]

"…and he never complained. Even when it was cold." [parent]

"Well, if you want to do it then you do it. And I will support you. Don't worry about what they say. Just blot them out and keep on going. And he kept going. He didn't give up. He wanted to, but he didn't." [parent]

"I felt sick. My nose was running. I was coughing. I had a headache a little bit…I just did it. And I took it. I walked a couple of times because I couldn't just run the whole time." [student]

Each parent discussed their own version of "no-quit rule." One mother referred to it as her 100% rule. She said she would support her children in whatever they pursued, but the understanding between her and her children was that all tasks had to be completed once begun. When asked why her child joined the program, one parent stated, "It was his idea and I thought it was a good idea and told him if was committed to it…he's got to take it all the way to the end." All three parents had some version of this rule that they viewed as a significant factor in the level of tenacity they saw in their children. In cases where teacher and parent interviews overlapped about the same participant, teachers verified they witnessed a level of self-determination from the student in the classroom. A

65

teacher commented about one ING RFSB participant, "He's generally very consistent. If

he tells you he's going to do something, he's going to do it. And he doesn't say

something unless he knows it." Each set of interviews revealed this character trait of self-

determination regardless of which group the student represented in this study. This led

me to hypothesize that other factors must have affected the level of persistence in ING

RFSB, particularly with Groups B and C.

Each ING RFSB participant who completed the 5K reportedly to followed

through with commitments at this young age and was reported to have already shown

consistent performance over time. Even though students did mention the influence their

parents had as the person responsible for transporting them to different events, including

to school each morning and the different off-site events, they did not mention the "no-

quit rule" other than to say they had no intention of quitting ING RFSB or giving up on

the completing the 5K once they had begun. It was clear from the teacher interviews that

teachers viewed student perseverance in the ING RFSB as an internal characteristic the

participants possessed when they entered the classroom and not as the result of an

external rule or expectation. For example, one teacher commented, "He is one of our

student leaders…He's very proactive. He will take care of the animals. He wants to help

in any way he can. If he can find a way, he'll just do it." Another teacher commented,

"She just seems like the type of student…with something as far as ING, she was going to

be committed to it. Once she starts something, she wants to continue with it."

Parents saw their role and teaching as vital to formation of self-determination in

their children. Teachers did not discuss their beliefs about the origins of self-

determination they witnessed from these students in the classroom. The participants in

the study did not discuss why they felt their level of self-determination or where they felt it had originated.

Self-Awareness

The second theme was the level of self-awareness students had about their involvement with ING RFSB and other activities in their lives. Each group of interview seemed to circumnavigate to students pursuing an interest of their own choosing. This was consistent in all three student groups I interviewed as well. Perseverance in ING RFSB seemed to be a choice students consciously made once they discovered enjoyment in their participation, regardless of their level of proficiency. Parents pointed out several instances where their child's strengths and weaknesses both inside and outside of school had been the result of the child's pursuit and had developed without the direct aid of friends and family.

ING RFSB participants saw themselves, in most cases, as separate from their friends and their ambitions of their friends. At the same time, they often measured their performance against their friends whether positively or negatively. However, comparison did not deter them from participation when circumstances allowed them to participate. Whereas parents often felt their participants had joined the program because of the influence of friends, students continuously referred to their own enjoyment in the program and their enjoyment seemed to outweigh the influence of friendships in terms of showing persistence in the program. For example, one student said, "My friend…quit the running club because she didn't want to do it anymore but I kept doing it." The student had not asked her friend why she has chosen to quit. Another student said he did feel

different from other students when participating in the program since, "Some are faster and some are slower. So everybody feels different."

Throughout the interview process, it was evident that friendships played an important role in the decision to join the program but not necessarily to stay in the program. Parents and teachers seemed to have little effect on the decision to join. ING RFSB participants viewed themselves as separate from their friends, although they wanted to be with their friends. And even though only a few females remained in the program, the females who did remain in the program and participated in the study would have been considered popular if rated by their friends. A teacher said, "I think she's friends with everyone–males and females," but she continued to attend the intervention when none of her other female friends did. And when asked about the commitment level of their friends, students who had shown consistency in the intervention distinguished their behavior from their friends' behavior. One student commented, "I think other students in ING are treated good…but some…need a little bit of…guidelines like to go in the right direction. They need a little push." Other students seemed to have already evaluated other students' level of commitment before the interview. One student, after commenting that some of his friends do not really try, also pointed out a student in a different grade level who does give his best effort. "I think he's pretty committed…He tries to get his stuff done and he doesn't goof around much. He tries not to pay attention to kids who…his friends who sometimes goof around. He tries not to pay 'em any attention." One student said he had quit another in-school activity because he felt peer pressure to do so. When I asked him what made him change his mind, he said,

"…because of how much work I put into it and the end was right around the corner and I don't want to stop now."

The students were aware of their own strengths, abilities, and desires. Without hesitation, each student wanted to discuss how much he or she enjoyed running and being part of the program. On more than one occasion, when asked if there was anything else they wanted to add before the interview was closed, students commented, "This was a great program" or "I hope we can have the program next year, too." When asked to elaborate on how she felt about being in the program, one female said, "I feel like I'm actually doing something right," and another said, "I do the runs because they are for a good cause. On the one-mile races I started so see an improvement. In the three-mile, there were eighteen people behind me!"

Goal Setting

"I wanted to be more sophisticated in my running."

Students who participated in ING RFSB in the fall of 2013 showed an outstanding level of determination and self-awareness, but the interviews revealed that the goals for the intervention had not been clearly articulated this year and were, at best, vague. Parents, teachers, nor students could clearly articulate the goals of the program goals or individual student goals. The inability to articulate the goal of the intervention seemed to indicate that the self-determination and self-awareness students brought into the program could have been harnessed more effectively to produce better results. I set out to find out how students, parents, and teachers had perceived the student's level of progress toward the goals of ING RFSB and delve further into why he or she accomplished that goal, but I found that the three sets of interviews revealed a focus and awareness of other goals, but

69

not the ING RFSB goal of completing a 5K by the end of the program. All three groups articulated and referenced the student's MAP goals for the school year.

At the start of the school year, teachers at Pleasant Elementary established MAP goals with their students. The teachers and students held an individual goal-setting conference based on the student's performance on the initial test at the start of the school year. The teachers guided the students and helped them adopt a strategy that was most likely to help them accomplish their learning target for the school year. This information was shared with parents at a private conference in the fall. Teachers held a second conference with students at the mid-point in the school year and again after the summative assessment at the end of the school year.

When teachers discussed the ING RFSB participant's work ethic, follow-through or commitment, they each referred to the MAP goals and each teacher knew, without a data notebook or reference chart in hand, whether the student had accomplished their reading and mathematics learning targets for the school year. Parents also pointed out whether their child had achieved their reading and math goals. When I asked one parent how her child was responding to the challenge of improving in a particular area, the parent commented, "…he brought home his MAP scores the other day and he was a little discouraged that he hadn't gotten higher than he did on it. He did well. He met his goals but he wanted it to be higher." When I asked whether he wanted more, she said, "Yes. He always wants more…better."

No one I interviewed mentioned completing a 5K as a goal for ING RFSB. No one mentioned childhood obesity. Goals that had been articulated, revisited, and monitored (i.e., MAP goals) were not only mentioned but accomplished as well. Some

students adopted the goal of completing a 5K on their own but they did not associate it with a goal that had been established for the intervention.

CHAPTER 5: DISCUSSION

The present study aimed to investigate how relationships affected the perseverance of participants in ING RFSB, a before-school running intervention designed to address sedentary behavior and combat childhood obesity with preadolescent youth in a rural elementary school setting. I asked two questions: a) how do elementary students in a voluntary before-school physical activity program perceive relationship indicators which impact program persistence? and b) how does parental, teacher, and peer involvement impact the program persistence of elementary level students in a voluntary before-school physical activity intervention?

ING RFSB participants at Pleasant Elementary scarcely referenced relationships as a significant factor for their choosing to persevere in this intervention in the fall of 2013 and spring of 2014. Instead, I found that participants viewed their perseverance as an intrinsic desire to pursue a personal interest they thought they would enjoy made possible with adult support. Adults served as enablers who supported the participants' new interest to make participation and perseverance possible. After all, in most cases, it was the participant who informed the parent or the teacher about the desire to be part of the intervention. The most successful participants had someone in their lives that

supported their interest in the intervention, and that interest, coupled with enjoyment, led to perseverance.

Even though the participants did not discuss the influence of relationships, I discovered that teachers and parents had a significant impact on academic perseverance as they helped students establish functional goals in areas where an interest already existed. The adults who were active in the lives of participants in this intervention played a significant role in molding participant interest and helping participants concentrate their energy to meet their academic goals. Goals that ING RFSB participants internalized, their classroom goals, may have been the result of a consistent expectation amongst the students, teachers, and parents. I surmised that even though students pursued an individual interest and approached ING RFSB with self-determination to persevere; influential adults helped them channel their energy and enthusiasm by working with them and keeping them mindful of their MAP goals in a more direct manner than with this intervention. Hence, they established expectations for performance and effort with strategies such as the "no-quit rule" the mothers implemented in the home.

Influential adults in the lives of the participants also affected their availability to participate in the ING RFSB intervention. One interviewee expressed regret that she had to quit a program she enjoyed and remembered fondly. She talked about the special connection she had formed with the leader of the group. She said she was not able to find another group like the one she had left behind when she and her family moved to this new area. Parents affect participation by whether or not they have the resources and time to transport or support the transportation of their children to the events and other life situations affect them as well. When the student moved away from a program and adult

73

who had been influential for her, her ability to reconnect and participate in a similar program was dictated by the family circumstance.

Another parent understood that her child desired to play football, but she had purposely kept him away from the sport because she feared that his health and wellbeing would have been jeopardized. A student could not complete the March 5K because his family had other obligations for the first Saturday morning 5K. He was disappointed that other priorities had stopped him from reaching his goal and that he had not had the opportunity to prove that he could have finished that race. Nevertheless, his commitment level to completing the second spring 5K remained high.

As I had observed in the pilot study, students joined ING RFSB because they wanted to have fun and be with their friends. I found that although friends may have influenced the initial decision to engage, persistence and the desire to finish a 5K involved a different motivation. The students persisted with ING RFSB because they enjoyed running and they rarely left the program even if their peers did.

Participants in this study, particularly those with the desire to complete a 5K, seemed to have self-confidence and knew themselves well enough to attempt something novel. They had the self-awareness and courage to continue with something they enjoyed when they had the support of adults who helped to make the opportunity accessible to them. Accessibility in this setting was a function of the timing of the program being in the morning so the majority of students could ride the bus to school and the willingness of parents to transport the participants to off-site events.

It was not clear why students referenced and were able to articulate their classroom goals more readily than they could articulate their goals for ING RFSB. One

reason could have been the timing of the interviews as they were conducted at the same time students, teachers and parents were finding out about their MAP goals for the year. Another reason for this could have been that the goals for ING RFSB, to complete a 5K, were too long term and intermediate goals were not communicated and internalized by the students.

Adults control access. Participants were keenly aware the external motivators their parents controlled and manipulated to gain compliance in other areas of their lives. For example, one student said, "I take it hard sometimes [when I make poor grades] because I don't always like to see the face that my grandma always has when she sees my Fs." Another student did not want to lose the opportunity to participate in ING RFSB and other school activities as a consequence of behaving poorly at school.

Parents and participants both associated running and attending running events with supporting a good cause. Both parents and participants expressed their pleasure at being able to do something fun while supporting someone who needed help. However, I was surprised at how differently student, parent and teacher perceptions of students' weaknesses were during the interviews. The teachers and parents often agreed on a participant's weakness, but the student always chose a different weakness. Neither of the parents I interviewed whose children were also interviewed gave the same answer as their children about an area of weakness that could be improved. This is an important factor as Bandura pointed out that a teacher summation of the student's strengths and weaknesses affect self-efficacy. Perhaps, the sample size was so small this could have been a coincidence, but the subject parents and teachers thought was most important was not an issue for the participants. This phenomenon leads back to an earlier assertion; Children

have a propensity to pursue and develop their own interests. All six students interviewed wanted to be better at mathematics and discussed a goal to become better in this area. The only issue was that their goals for improving in mathematics were vague, and only one student gave a specific strategy for how he was going to improve in this area. Everyone else said their goal was either to make better grades or to make As in math. Assuming this is a representative sample of at least the children who participated in ING RFSB at Pleasant Elementary, and ING RFSB students represent one third of the student body in the school, Pleasant Elementary may consider enhancing efforts to promote more confidence in mathematics as well.

Implications for Practice

Educators must continue to find creative links between student interests and the required subjects in schools. The key to finding this level of persistence in children and convincing them that they can persist through difficult circumstances may be through differentiation and provided a plethora of opportunities for students to identify and attempt what they believe they will enjoy. Preadolescent youth must be given autonomy to choose until they find the activity that is right for them. For this group, it was running. For other groups, it may be dance, walking, or other simple, inexpensive interventions designed to promote physical activity.

The setting for this particular intervention, specifically offering this intervention to students in the morning, was a vital to the success of the program and its participants because it removes not only the transportation barriers in this low-income area, but it also allows students to pursue this beneficial interest in spite of the time and resource constraints that many of their parents and guardians have.

Initially, I concluded that communication of clear goals for academic progress seemed to raise awareness and increased expectations between parent, teacher, and student. I was disappointed that the same energy level and consistency was not present in the discussion of goal setting when the participants, parents, and teachers discussed ING RFSB. I felt that the lack of focus represented a significant opportunity for improvement if the program were to continue. Perhaps I used erroneous criteria to judge the success of the program, and I felt that in order for ING RFSB to continue to maintain student interest for the duration of the program, clear goal setting must be done more intentionally and effectively. I also felt the goal-setting aspect of the program needed emulate the classroom goal-setting practices so the number of students who complete a 5K is increased.

Perhaps, students', teachers', and parents' inability to articulate my goals for ING RFSB was not a negative facet of the program and could have been a positive aspect of the program. In other words, the goal of the intervention should not be to complete a 5K; that would be a performance goal. Allowing participants to establish personal goals to better themselves–mastery goals–is the approach that research supports. In addition to that, although children understand that one number is higher than another on their MAP tests, those are also external goals. Like I witnessed when I inquired about weaknesses, participants assessed their needs differently than the adults who assessed their needs for them. The general goals, to combat childhood obesity and eliminate sedentary behavior, were more attuned to what most participants wanted and needed from the intervention, rather than finishing a 5K race. Reis (1998) had reported the critical need for teachers and parents to grasp the difference between their goals for students and the students' goals to

77

avoid internal emotional conflict and the underachievement that may result when gifted students are pushed toward goals that are not in line with their personal values. Furthermore, this research supported Weslowski (1982), who found that students gained better self-awareness when they developed their own objectives that were within their means and realized their own possibilities. This is a significant connection to leadership theory since, as Marion (2002) stated, leaders who lead cultural change should develop a general vision to guide action. Perhaps the goal of a 5K race was too specific to spawn ownership, whereas the goals to increase activity and subsequently decrease a sedentary lifestyle were broad enough to encourage action and a shift in culture. In addition, Marion asserted that effective leaders needed to be sensitive to the goals of their followers and stimulate performance by supporting those goals by removing barriers and frustrations. A more effective expectation would have been to help participants form their own goals for the program by providing them structure and teaching them to set meaningful personal goals.

It is worth mentioning that the female participants all referred to a female staff member and male participants referred a male staff member when asked whether there was someone they could talk with if they had a problem while participating in ING RFSB. This was noteworthy especially considering there were no females involved with the program during the fall and spring of the 2013 school year except when we traveled to organized events and teachers and parents came along with us. Most often, female participants mentioned one of the female school counselors and the males mentioned a male teacher in their grade level. The lack of a female presence in the program like we had in the program's first two years may have had an adverse effect on female

participation this year. Except where the interest and competence level was very high, I don't believe the females who left the program found that the program related to them or met their specific needs. In other words, relatedness may have been absent for the large majority of female participants. It may be important that Pleasant Elementary either implement a program designed specifically for female students, such as Girls on the Run, or designate at least one female leader to be involved with the program. The preadolescent females involved in this intervention need to engage in rigorous physical activity and they must have a comfortable setting in which to do so. Pleasant Elementary needs to capitalize on this missed opportunity by recruiting preadolescent female students and mentors to create and organize a program specifically for females with goal setting as a key component of the program. Given the opportunity to socialize with friends and form relationships around a common challenge to improve, females may engage with rigorous physical activity and learn to perseverance at an advanced level.

There is some evidence to suggest that a gender-specific approach to the issue I encountered with the female participants could be addressed by separating the males and females. Dee (2007) reported that same-gender teachers significantly improved the achievement of both boys and girls. And a gender-specific solution might have seemed favorable if Geno Auriemma, the male head coach of the University of Connecticut women's basketball team hadn't already won nine NCAA National Championships. Marsh, Martin, and Cheng (2008) conducted research with 964 high school students in five coeducational government schools and concluded there was no significant difference in male and female motivation respective to the gender of the instructor. Instead, they concluded that student perceptions of classroom climates within particular classes

effected the motivation of individual students. Their research concluded that neither student age and gender, teacher gender, school subject, nor the interactions of the three variables had a significant impact on student motivation. In fact, they noted that girls were generally more motivated than boys in the mathematics, science, and English classes they investigated. Chudgar and Sankar (2008) found female instructors to be advantageous for students' language learning but reported that teachers' gender had no effect on mathematics learning. Furthermore, other research has suggested that female participation in and attitudes towards physical education could be influenced by teacher expectations, the girls' personal gender-role stereotypes, and whether or not they perceived the physical education environment to be emotionally and physically safe for them to participate (Constantinou, Manson, & Silverman, 2009). And although Sokal and Katz (2008) found no difference in the reading achievement of boys whether or not they were taught by males of female teachers, they did record a significant difference in the attitudes of the boys who had a male instruction. They attributed the difference in attitude to the attributes of the specific male teacher, pointing again to classroom climate and environment rather than a gender specific solution.

Perhaps my generalization that females need a female educator to connect with in order to have been successful in ING RFSB is not accurate. Maybe the issues of environment created for ING RFSB did not appeal to the female participants. It could have been the overwhelming number of male participants and their personal interest in competition and performance goals that female students tended to reject. What is important is that program coordinators continue to recognize that some hard-wired gender differences exist and can be mediated through effective brain-compatible learning

80

environments. Kovalic (2008) referred to nine elements of brain compatible classroom learning environments, which I believe are applicable to the ING RFSB setting:

1. Absence of threat

2. Meaningful content

3. Choices

4. Enriched environment

5. Movement to enhance learning

6. Adequate time

7. Immediate feedback

8. Collaboration

9. Mastery (application)

Goal setting must be incorporated in the ING RFSB whether or not the intervention is funded through the ING RFSB grant. The goal-setting practices for this intervention need to be clear to the students so they have a clear understanding of what they are trying to achieve. Students need to have baseline information about their performance before the program begins and they need guidance to establish clear goals.

Recommendations for Future Research

I referred to the setting for this research project as a barrier for collecting data about the program. Acting as a supervising participant observer created some difficulty for me as I attempted to record student reflections about the program and conduct focused observations. Should another researcher attempt to conduct research with a program this size, she would want to solicit the assistance of another adult to assist with the

management functions of the of program to allow more time for focused observations of the program.

Another aspect of the setting that could be addressed is the goal-setting structure of the program. Increasing physical activity throughout the school setting could be viewed as a general goal to affect the culture of the school population without overemphasizing the performance needed to complete a 5K race. Whether or not to implement a gender-specific program could be a premature decision without further investigating the reasons females are leaving the program. One avenue of further research would be to only focus on the females in the program and understand their motivations for participating in the program and what they need in order to persevere.

Given more time in the research setting, I would have asked for student consent to participate in the research project the first week of the intervention. I would have followed the development of a small group of students in the program and made notes about them throughout the duration of the program. If a student who was part of the research project had decided to leave the program, I would like to have conducted the interview with that student immediately and seek to interview the parent at that time as well.

I did not include artifacts, such as essays, like I had done in the pilot study. Essays would have been another avenue of triangulation that may have yielded more insight, especially in cases where participants needed to be more forthcoming about the relationships that led to their attitude of persistence in the program. Also, with the exception of one teacher, there were no adult males included in this project. I would like to have gained access to interview at least one father who was associated with the

program. One avenue for further research would be further investigation into the "no-quit rule" that parents establish in the home and exploring the implications of that rule. Fitzgerald et al. had identified girls, overweight youth, and youth with low levels of perceived competence as high risk and reported those groups had significantly lower levels of support from their peers and fathers.

Including classroom observation on both running and non-running days may have helped to gain a clear understanding the mind-body connection. This would have allowed me to examine whether or not the participants approached their schoolwork any differently on intervention and nonintervention days. A change within an educational institution, like providing ING RFSB for elementary students before school, needs be assimilated into the beliefs and operating principles of individuals the innovation is to affect. When this happens, a paradigm shift and a second order changes occur (Marzano, Zaffron, Zraik, Robbins, & Yoon, 1995). From a leadership perspective, this would be a way to determine whether the intervention is transferring to the academic and social domains. Along the same lines, future ING RFSB organizers need to identify creative ways to involve female and male participants in the culture in order to realize the short-term and long-term goals of the program; this is a function of leadership (Turan & Bektas, 2013).

This relates to student autonomy; being able to choose themselves whether or not to participate and persist. Students in ING RFSB expressed competence in their ability to participate and improve in the program even though, in most cases, they had established their own improvement goals. In terms of relatedness, these students did relate to other individuals in the program but their relatedness was more strongly tied to initial interest

in the program than it was to persisting with the intervention. This research project had added the existing conversation about preadolescent physical activity

It is also important that the structure of the program remain the same for the duration of 5K race in the spring of 2014. I made a poor decision to provide transportation to the one-mile races in the fall and not provide transportation to the 5K events in the spring. Participation for both runs when transportation was provided was doubled or tripled the participation of the spring for the 5K races. I was disappointed that many students who had shown exemplary participation did not complete either of the 5K events. Because I altered the rules at the end of the program, I put more pressure on the parents to be able to attend the races and that decision may have hindered some students who were dependent on transportation to accomplish the goal of completing all the events with the group. Future researchers should keep the transportation format and expectations the same to increase the reliability.

REFERENCES

Ames, C. (1992). Classrooms: Goals, structures, and student motivation. *Journal of Educational Psychology*, 85, 395-405.

Austin, J.T. & Vancouver, J.B. (1996). Goal constructs in psychology: Structure, process, and content. *Psychological Bulletin*, 120, 338-375.

Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review*, 84, 191-215.

Bandura, A. (1991). Social cognitive theory of self-regulation. *Organizational behavior and human decision processes*, 50, 248-287.

Bandura, A. (1994). Self-efficacy. In V. S. Ramachaudran (Ed.), Encyclopedia of human behavior (Vol. 4, pp. 71-81). New York: Academic Press. (Reprinted in H. Friedman [Ed.], Encyclopedia of mental health. San Diego: Academic Press, 1998).

Bandura, A. (1997). Self-efficacy: The exercise of control. New York, NY: Freeman.

Barkoukis, V., Ntoumanis, N., Thøgersen-Ntoumani, C. (2010). Developmental changes in achievement motivation and affect in physical education: Growth trajectories and demographic differences. *Psychology of Sport and Exercise*, 11, 83 – 90.

Barron, K. E., & Harackiewicz, J. M. (2000). Achievement goals and optimal motivation: Testing multiple goal models. *Journal of Personality and Social Psychology*, 80, 706-722.

Barron, K. E., Harackiewicz, J. M. (2003). Revisiting the benefits of performance-approach goals in the college classroom: Exploring the role of goals in advanced college courses. *International Journal of Educational Research*, 39, 357-354.

Baum, S. M., Renzulli, J.S., & Hébert, T.P. (1995). Reversing underachievement: Creative productivity as a systematic intervention. *Gifted Child Quarterly*, 39, 224-235

Brunstein, J.C. (1993). Personal goals and subjective well-being: A longitudinal study. *Journal of Personality and Social Psychology*, 65, 1061-1070.

Chudgar, A. & Sankar, V. (2008). The relationship between teacher gender and student achievement: Evidence from five Indian states. *Compare,* 38(5), 627-642.

Constantinou, R., Manson, M. & Silverman, S. (2009). Female students' perceptions about gender-role stereotypes and their influence on attitude toward physical education. *Physical Education*, 66(2), 85-96.

Covington, M. (1998). *The will to learn: A guide for motivating young people.* New York: Cambridge University Press.

Davidson, R.J. (1994). Asymmetric brain function, affective style and psychopathology: The role of early experience and plasticity. *Development and Psychopathology*, 6, 741-758.

Davidson, R.J. (1998). Affective style and affective disorders: Perspectives from affective neuroscience. *Cognition and Emotion*, 12, 307-320.

Deci, E.L. (1971). Effect of externally mediated rewards on intrinsic motivation. *Journal of Personality and Social Psychology*, 18, 105-115.

Deci, E.L. & Ryan, R. M. (1985). Intrinsic motivation and self-determination in human behavior. New York: Plenum.

Deci, E. & Ryan, R. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist*, 55, 68-78.

Dee, T. (2007). Teachers and the gender gaps in student achievement. *The Journal of Human Resources,* 42(3), 528-554.

Debate, R.D., Gabriel, K.P., Zwald, M., Huberty, J., & Zhang, Y. (2009). Changes in psychological factors and physical activity frequency among third-to eighth-grade females who participated in a developmentally focused youth sport program: A preliminary study. *Journal of School Health,* 79, 474-484.

Diamond, A. & Lee, K. (2011). Interventions shown to aid executive function development in participants 4-12 years old. *Science*, 333, 959-964.

Donnelly, J.E., Green, J.L., Gibson, C.A., Smith, B.K., Washburn, R.A., Sullivan, D.K., et al. (2009). Physical activity across the curriculum (PAAC): A randomized controlled trial to promote physical activity and diminish overweight and obesity in elementary school participants. *Preventive Medicine*, 49, 336 – 341.

Duckworth, A. L., Peterson, C., Matthews, M. D., & Kelly, D. R. (2007). Grit: Perseverance and passion for long-term goals. *Journal of Personality and Social Psychology*, 92, 1087-1101.

Dweck, C. S. (1986). Motivational processes affecting learning. *American Psychologist*, 41, 1040-1048.

Eccles, J., Wigfield, A., Harold, R.D., & Blumenfeld, P. (1993). Age and gender differences in participants's self- and task perceptions during elementary school. *Child Development,* 64, 830-847.

Elliot, A. J. (1997). Integrating the 'classic' and 'contemporary' approaches to achievement motivation. In M. L. Maehr & P. R. Pintrich (Eds.), Advances in motivation and achievement (Vol. 10, pp. 143-179). Greenwich, CT: JAI Press.

Elliot, A. J. (1999). Approach and avoidance motivation and achievement goals. *Educational Psychologist*, 34, 169-189.

Fitzgerald, A., Fitzgerald, N, & Aherne, C. (2012). Do peers matter? A review of peer and/or friends' influence on physical activity among American adolescents, *Journal of Adolescence,* 35, 941-958.

Fox, C.K., Barr-Anderson, D., Neumark-Sztainer, D., & Wall, M. (2010). Physical activity and sports team participation: Associations with academic outcomes in middle school and high school students. *Journal of School Health*, 80, 31-37.

Gallagher, J.J., & Gallagher, S. A. (1994). Teaching the gifted child (4th ed.). Boston, MA: Allyn & Bacon.

Gifford-Smith, M., Dodge, K.A., Dishon, T.J. & McCord, J. (2005). Peer influence in participants and adolescents: Crossing the bridge from developmental to intervention science, *Journal of Adolescent Psychology*, 33, 255-265.

Gollwitzer, P.M. (1999). Implementation intentions: Strong effects of simple plans. *American Psychologist*, 54, 493-503.

Gonida, E., Kiosseoglou, G. & Voulala (2007). Perceptions of parent goals and their contribution to student achievement goals orientation and engagement in the classroom: Grade-level differences across adolescence, *European Journal of Psychology of Education,* 22, 23-39.

Goodenow, C. (1992). School motivation, engagement, and sense of belonging among urban adolescent students. Paper presented at the Annual Meeting of the American Educational Research Association, San Francisco, CA.

Grant, B. (1995). The place of achievement in the life of the spirit and the education of gifted students. *Roeper Review*, 18, 132-134.

Grant, H., & Dweck, C. S. (2003). Clarifying achievement goals and their impact. *Journal of Personality and Social Psychology*, 85, 541-553.

Hillman, C.H., Erickson, K.I., & Kramer, A.F. (2008). Be smart, exercise your heart: Exercise effects on brain and cognition. *Perspectives*, 9, 58 – 65.

Huang, S., Hung, W., Sharpe, P.A., & Jackson, W.P. (2010). Neighborhood environment and physical activity among urban and rural school participants in Taiwan. *Health & Place*, 16, 470-476.

Holt, N.L., Bewick, B.M., & Gately, P.J. (2005). Participants' perceptions of attending a residential weight-loss camp in the UK. *Child: Health, Care, & Development*, 31, 223-231.

John W. Gardner Center for Youth and Their Communities (2010). An initiative to combat childhood obesity: First Lady Michelle Obama's l*et's move!* campaign. Retrieved March 22, 2010, from http://gardnercenter.stanford.edu/docs/LetsMovePFS.pdf.

Karakowsky, L. & Mann, S.L. (2008). Setting goals and taking ownership: Understanding the implications of participatively set goals from a causal attribution perspective. *Journal of Leadership & Organizational Studies*, 14, 260-270.

Kaylor, M. & Flores, M. (2007). Increasing academic motivation in culturally and linguistically diverse students from low socioeconomic backgrounds. *Journal of Advanced Academics*, 19, 66-89.

King, L. A., & Miner, K. N. (2000). Writing about the perceived benefits of traumatic events: Implications for physical health. *Personality and Social Psychology Bulletin*, 26, 220-230.

Knisel, E., Opitz, S., Wossmann, M., Ketelhut, K. (2009). Sport motivation and physical activity of students in three European schools. International *Journal of Physical Education,* 46, 40-53.

Koestner, R., Lekes, N., Powers, T. A. & Chicoine, E. (2002). Attaining personal goals: Self-concordance plus implementation intentions equal success. *Journal of Personality and Social Psychology*, 83, 231-244.

Kovalic, S. (2008). Gender differences and student engagement. *International Center for Leadership in Education.*

Latham, G.P., & Locke, E. A. (2007). New developments in and directions for goal-setting research. *European Psychologist*, 12, 290-300.

Latham, G.P., Seijts, G. H. (1999). The effects of proximal and distal goals on performance on a moderately complex task. *Journal of Organizational Behavior*, 20, 421-429.

Let's Move. America's move to raise a healthier generation of kids (n.d.) Retrieved March 22, 2010, from http://www.letsmove.gov/.

Locke, E. A., & Latham, G. P. (2002). Building a practically useful theory of goal setting and task motivation: A 35-year odyssey. American Psychologist, 57, 705-717.

Locke, E. A., Shaw, K. N., Saari, L. M., & Latham, G. P. (1981). Goal setting and task performance: 1969 – 1980. *Psychological Bulletin*, 90, 125-152.

MacDonald, D., Rodger, S., Zivani, J., Jenkins, D., Batch, J. & Jones, J. (2004). Physical activity as a dimension of family life for lower primary school participants. *Sport, Education, and Society*, 9, 307-325.

Madison, D.S. (2005). Critical ethnography: Methods, ethics, and performance. Sage Publications, Inc.: Thousand Oaks, CA.

Marion, R. (2002). Leadership in education: Organizational theory for the practitioner. Long Grove, IL: Waveland Press, Inc.

Marsh, H.W., Martin, A.J. & Cheng, J.H. (2008). A multilevel perspective on gender in classroom motivation and climate: Potential benefits of male teachers for boys? *Journal of Educational Psychology,* 100(1), 78-95.

Marzano, R., Zaffron, S., Zraik, L. Robbins, S. & Yoon, L. (1995). A new paradigm for educational change. *Education,* 116, 162-173.

Maturo, C. & Cunningham, S. (2013). Influence of friends on children's physical activity: A review, *American Journal of Public Health,* 103(7), 23-38.

Mohr, D.J., Townsend, J.S., & Pritchard, T. (2006). Rethinking middle school physical education: Combining lifetime leisure activities and sport education to encourage physical activity. *The Physical Educator,* 63, 18-29.

Morisano, D. & Shore, B. M. (2010). Can personal goal setting tap the potential of the gifted underachiever? *Roeper Review*, 32, 249-258.

Noguera, P. (2007). How listening to students can help schools to improve. *Theory into Practice*, 46(3), 205-211.

Perrone, K. M., Civiletto, C. L., Webb, L. K., & Finch, J. C. (2004). Perceived barriers to and support of the attainment of career and family goals among academically talented individuals. *International Journal of Stress Management*, 11, 114-131.

Ploughman, M. (2008). Exercise is brain food: The effects of physical activity on cognitive function. *Developmental Neurorehabilitation*, 11(3), 236-240.

Praag, H. von (2009). Exercise and the brain: Something to chew on. *Trends in Neuroscience*, 32, 283 -290.

Reis, S. M. (1998). Underachievement for some – Dropping out with dignity for others. Communicator. *The Journal of the California Association of the Gifted*, 29(1), 19-24.

Richert, E. S. (1991). Patterns of underachievement among gifted students. In M. Bireley & J. Genshaft (Eds.), Understanding the gifted adolescent: Educational, developmental and multicultural issues (pp. 139-162). New York, NY: Teachers College Press.

Ryan, T. A. (1970). Intentional behavior. New York, NY: Ronald Press.

Ryan, R. M., Sheldon, K. M., Kasser, T., & Deci, E. L. (1996). All goals are not created equal: An orgasmic perspective on the nature of goals and their regulation. In P. M. Gollwitzer & J. A. Bargh (Eds.), The psychology of action: Linking cognition and motivation to behavior (pp. 7-26). New York, NY: Guilford.

Sajjadi, S. H., Rejskind, F. G., & Shore, B. M. (2001). Was multipotentiality a problem or not? A new look at the data. *High Ability Studies*, 12, 27-43.

Schmidt-Kassow, M., Kulka, A., Gunter, T.C., Rothermich, K., & Kotz, S.A. (2010). Exercise during learning improves vocabulary acquisition: Behavioral and ERP evidence. *Neuroscience Letters,* 482, 40-44**.**

Schunk, D. H. (1991). Self-efficacy and academic motivation. *Educational Psychologist*, 26, 207-231.

Sideridis, G. & Kaplan, A. (2011). Achievement goals and persistence across tasks: the roles of failure and success. *Journal of Experimental Education*, 79, 429-451.

Skaalvik, E. M. (1997). Self-enhancing and self-defeating ego orientation: Relations with task and avoidance orientation, achievement, self-perceptions, and anxiety. *Journal of Educational Psychology*, 89, 71-81.

Sokal, L. & Katz, H. (2008). Effects of technology and male teachers on boys' reading. *Australian Journal of Education,* 52(1), 81-94.

Solmon, M.A. & Carter, J.A. (1995). Kindergarten and first-grade students' perceptions of physical education in one teacher's classes. *The Elementary School Journal*, 95, 355-365.

Stroth, S., Reinhardt, R.K., Thöne, J. Hille, K., Schneider, M., Härtel, S. et al. (2010). Neurobiology of learning and memory. *Neurobiology of Learning and Memory*, 94, 364 – 372.

Tappe, K., Glanz, K., Sallis, J., Zhou, C. & Saelens, B. (2013). Children's physical activity and parents' perception of the neighborhood environment: neighborhood impact on kids study, *International Journal of Behavioral Nutrition and Physical Activity,* 10:39. Retrieved from http://www.ijbnpa.org/content/10/1/39

Tompkins, C., Hopkins, J., Goddard, L. & Brock, D. (2012). The effect of an unstructured, moderate to vigorous, before-school physical activity program in elementary school children on academics, behavior, and health. *BMC Public Health,* 12. Retrieved from http://www.biomedcentral.com/1471-2458/12/300.

Turan, S. & Bektas, F. (2013). The relationship between school culture and leadership practices. *Eurasian Journal of Educational Research,* 52, 155-168.

Vallerand, R.J. (2000). Deci and Ryan's self-determination theory: A view from the hierarchal model of intrinsic and extrinsic motivation. *Psychological Inquiry,* 11, 312-318.

Webb, J. T., Meckstroth, E. A., & Talan, S. S. (1982). Guiding the gifted child: A practical source for parents and teachers. Columbus, OH: Ohio Psychology Publishing.

Weslowski R. J. (1982). Real educational objectives. *Roeper Review*, 5, 32-35.

Willingham W. W. (1985). Success in college: The role of personal qualities and academic ability. New York: College Entrance Examination Board.

Wine J. (1971). Test anxiety and direction of attention. *Psychological Bulletin*, 76, 92-104.

Xiang, P., McBride, R.E., & Bruene, A. (2004). Fourth graders' motivation in an elementary physical education running program. *The Elementary School Journal,* 104, 253-266.

Yli-Piipari, S., Watt, A., Jaakkola T. Liukkonen, J. & Nurmi, J. (2009). *Journal of Sports Science and Medicine,* 8, 327-326.

APPENDIX A: INTERVIEW QUESTIONS

STUDENT QUESTION

1. (A) How do you feel about being a part of INGRFSB?

2. (A) How do you feel you are treated? How do you feel other students are treated?

3. (A) In INGRFSB, do you feel any different from other students there?

4. (B) How is your relationship or interaction with your teachers? What about with the teachers involved with INGRFSB?

5. (B) In INGRFSB, is there at least one teacher or other adult you can talk to if you have a problem?

6. (C) Are you involved in other programs/activities outside of school? What are they?

7. (C) Are those other activities more or less difficult than your work in INGRFSB?

8. (D) Have you ever thought about quitting the program? Or Why did you stop participating in the program?

9. (D) Have you ever quit something in which you participated? Why did you quit?

10. (E) Have you ever quit an activity when your friends continued in the activity? What was it?

11. (F) How would you describe your level of commitment to being able to complete a 5K race?

12. (E) What about your friends who are in the program with you, are they

committed?

13. (F) What do you think it means to be committed?

14. (I) What did you hope to accomplish being part of INGRFSB?

15. (G) What is the most challenging subject for you in class? Why?

16. (G) Do you have a goal for getting better in this subject?

17. (B/G) How are you dealing with that challenge? If you need more help, do you

receive the extra help you need?

18. (E) Do you have friends who struggle in this subject too? How do they respond

when the work is challenging in class?

19. (H) How would you describe the relationship between your parents and your

teacher?

(*The first five questions are adapted from Carol Goodenow's Psychological Sense of School Membership scale. She presented the questions as statements in a survey which were evaluated in a 1-5 scale*).

TEACHER QUESTIONS

1. (G) Tell us about student X's work ethic and participation in your class.

2. (G) Based on your assessment, which subject area shows the most opportunity for

improvement for this student?

3. (G) In that area, how does this student respond when challenged?

4. (G) How would you describe this student's level of commitment to mastering

her/his goals in this area?

5. (E) What about her/his friends? Are they committed to mastering their goals in

their areas of weakness?

6. (B) Please describe your relationship with this student.

7. (H) Describe your relationship with this child's family.

8. (E) Describe this student's friendships or bonds with other students.

9. (A) What has been your perception of this student's involvement in INGRFSB?

10. (E) Do any of his friends participate in INGRFSB?

11. (A/D) Does this student ever mention INGRFSB? If so, what kind of comments are made and to whom?

12. (I) If yes, has your student ever shared any goals with you related to the INGRFSB program?

13. (I) Does this student share or seem interested in other school related goals?

14. (C) Does this student ever talk about any activities he or she participates in outside of school?

15. (F) How would you describe this student's commitment level to the INGRFSB?

PARENT QUESTIONS

1. (A) Tell us about you and your child's involvement in INGRFSB?

2. (A) Why do you think he/she enrolled in the program this year?

3. (C) What other activity (ies) is your child involved in both inside and outside of school?

4. (E) Does she/he have friends involved in those same activities?

5. (D) Has she/he ever given up on or wanted to give up on an activity? Why do you believe he/she felt this way?

6. (C/G) Can you identify one area that you would like to see your child improve in that presents difficulty for him/her? Does your child also view this area as a weakness?

7. (G) In what area do you both agree that more work is needed?

8. (G) How does she/he respond to that challenge?

9. (B) Describe her/his relationships with family. What about with friends?

10. (E) Are her/his friends more or less committed to their progress in school? Please explain.

11. (F) Does she/he have friends and/or family who emphasize physical fitness?

12. (F) If so, how have they supported your child's work in INGRFSB?

13. (F) Have you been able to support your child regarding the INGRFSB Program?

14. (F/G) What commitments have you had to make for her/him to progress in physical fitness? In academics?

15. (A) Is your child enthusiastic about participating in INGRFSB? How do you know?

16. (H) Describe your relationship with your child's teacher. Has this been typical with past teachers as well?

17. (I) Has your child ever shared any goals with you related to the INGRFSB program?

APPENDIX B: INTERVIEW ANALYSIS CATEGORIES FOR INTERVIEWS

    A. Feelings about INGRSB

    B. Adult Relationships and INGRSB

    C. Other Programs/Activities

    D. Quitting INGRSB

    E. Quitting Other Activities

    F. Commitment/Support (Parental Commitment)

    G. Academic Challenges/ Commitment

    H. Parent-teacher Relationships

    I. Goals