

ANALYSIS OF STUDENT ENGAGEMENT OF 7TH GRADE STUDENTS IN
ELBERT COUNTY, GEORGIA

by

LAUREN MELISSA MACIAS-DYE

(Under the Direction of Maria Navarro)

ABSTRACT

High school dropout is a problem in the United States, particularly for students of low socioeconomic status. A high level of student engagement will help students achieve graduation. In this study, the researcher used existing data collected from the Student Engagement Instrument to examine engagement among students in the 7th grade at Elbert County Middle School (rural Georgia), where poverty is higher than the national and state average. Significant differences were found between the higher and lower scoring constructs. Constructs scored (from highest to lowest): future goals and aspirations, family support for learning, intrinsic reward, peer support for learning, control for school work and relevance, 4-H relationship and teacher student relationship. No significant differences were found in engagement values between demographic groups, including racial/ethnic groups (Latino, non-Latino White and non-Latino Black/Biracial students).

INDEX WORDS: student engagement; Latino students; middle school engagement; student achievement; high school graduation; dropout crisis; youth-adult partnerships; peer support for learning; future goals and aspirations; family support for learning; student-teacher relationship; 4-H relationship; control and relevance of school work; intrinsic reward

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DEDICATION

This thesis is dedicated those who remain in the shadows and who are frightened to use their voice in a world of social injustices. To those who dare to dream and act outside of their comfort zone. To those who inspire greatness in students of underserved populations. And to those students from underserved populations who make a difference in the world, despite what the world says about them. You are my hope and my inspiration.

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CHAPTER ONE

INTRODUCTION

Introduction

4-H Positive Youth Development is a prominent objective of the land grant mission. Dating back to 1862, the Morrill Act was created to bring affordable and necessary education to a wider range of the United States population (Association of Public and Land-grant Universities, 2012). Over one-hundred and fifty years later, Extension professionals are still providing practical education for citizens throughout the country. As a part of the land-grant system, and more specifically Cooperative Extension, the duty of 4-H youth development is to empower youth to change the world by learning and working in a positive youth-adult partnership (National 4-H Council, 2015). According to the National 4-H Council (2015), there are nearly thirty-two million youth members, volunteers, professionals and alumni working together across the United States to project our country into a positive future. The framework provided by Cooperative Extension to work with youth in positive development is unlike any other organization in the world.

In order for students to be successful in school, research indicates they should be engaged in school learning (Appleton, Christenson, Kim, & Reschly, 2006). Student engagement is considered to be a cornerstone of student

achievement. One way to increase student engagement is for students to participate in a positive youth development extra-curricular activities, such as 4-H. Positive youth development programs assist students in goal attainment, adaption, integration and tension management (Williamson, 1998). According to research, 4-H'ers outshine their peers by making healthier choices, excelling in school and science and being committed to improving their communities (Lerner et al., 2013). More motivation to continue education and better student achievement are just some benefits of 4-H. 4-H'ers generally have better grades, more academic competence and are more actively engaged in school. Students participating in positive youth development are also two times more likely to attend college (Lerner et al., 2013).

Increasing the diversity among our student body, in terms of high school graduates and in college enrollment, and workforce, is a positive movement toward a more culturally encompassing world. Education diversity should promote advanced ethical treatment, in addition to equal opportunities for all. If our society can be accepting of diversity, we will see more innovation and even greater financial successes for organizations. However, a major factor in preventing this long-term goal is related to minority student engagement, participation in extra-curricular activities, and in continuing their education. The success of Cooperative Extension (4-H) depends on meeting the needs of all

students, paying particular attention to those students who are at a higher risk of not graduating. Educational research has advocated the use of culturally responsive teaching as a strategy most effective in reaching underrepresented youth (Jones, LaVergne, Elbert, Larke & Larke, 2013).

Situational Context

This study is conducted in Elbert County, Georgia. Elbert County is geographically located in northeast Georgia, along the South Carolina border. Elbert County is a rural county with limited industrial opportunities. Elbert County has a population of less than 20,000 (U.S. Census Bureau, 2015). The county has one primary school, one elementary school, one middle school, one high school and a charter school.

Low academic achievement has been well correlated to low socioeconomic status (Payne, 2005). When comparing median household incomes, Elbert County's is \$35,170, Georgia's is \$49,342 and the United States' is \$53,482 (U.S. Census Bureau, 2015). The poverty level across the country is 14.8%, in Georgia 18.3%, and in Elbert County 23.4% (U.S. Census Bureau, 2015). Thus, Elbert County has both a significantly lower median household income, and a significantly larger level of poverty than both the state and the nation. Only 78.1% of the population in Elbert County has a high school diploma, compared to 85% across the state and 86.3% across the nation (U.S. Census

Bureau, 2015). Further, the national percentage of people who have obtained a Bachelor's degree is 29.3%, in Georgia it drops slightly to 28.3%, and in Elbert County there is a large drop to only 10.7% of the population (U.S. Census Bureau, 2015).

All schools in the Elbert Country School System are Title 1 schools, which means the school is eligible for government assistance because a high enough percentage of students come from low income families. During fiscal year 2015, 78.52% of the students in the county public school system received free and reduced lunch services (FRL) (Georgia Department of Education, 2015a). The 2015 graduation rate from Elbert County High School was 81.7% (Georgia Department of Education, 2015b). In the system, 51% of the students were White, 36% Black, 9% Latino, 3% of two or more races, and 1% "other" (Georgia Department of Education, 2015c). During the 2014-2015 school year, Elbert County Middle School [ECMS] served 849 students across four grade levels (5th-8th) (Georgia Department of Education, 2015d). Of these students, 13% received Special Education services, 3% English language learner services, and 10% gifted services (personal communication, ECMS school counselor).

The Latino population in Elbert County grew from 134 people in 1990 (1%) to 996 in 2011 (5%), and it continues to grow (Pew Research Center, 2015). Over the last ten years, the Latino population has rapidly grown in the United States. Latinos are now the largest minority group at nearly fifty-five million throughout the country (Krogstad & Lopez, 2015) and many researchers project that the Latino population in the United States will continue to be the majority

minority (Moreno & Gaytan, 2013; U.S. Census Bureau, 2012). Since the 1990s there has been a rapid relative growth of Latino populations settling in communities like Elbert county in Georgia and other Southern States where there was not a tradition of Latino populations (Dinan, 2005; Kochhar, Suro, & Tafoya, 2005; Marotta & Garcia, 2003), and some of the receiving communities are not prepared to adapt to these rapidly changing demographics (Herndon, Behnke, Navarro, Daniel, & Storm, 2013). Thus, public service organizations in these communities, including Extension, need to transform and enhance their programs to better serve all their stakeholders (Behnke, 2008; Herndon et al. 2013; Hobbs, 2004)

According to the Pew Research Center (2015), Latinos represent 9% of the population in Georgia. While the median annual personal earnings of non-Latino Whites (16 and older) in Georgia is \$31,000, it is only \$18,300 for Latinos and \$25,000 among non-Hispanic Blacks. Similarly, while the poverty rate among non-Hispanic White youth (17 and younger) in Georgia is 15%, it is 41% among Latinos and 38% among non-Hispanic Blacks (Pew Research Center, 2015). Currently, the Latino student high school dropout rate more than doubles that of non-Latino White students and is significantly higher than that of African American students as well (Villenas & Deyhle, 1999). This in turn causes a lower life-long socioeconomic status for Latinos which also results in a greater potential for a lower quality of life; physical health worsens over time, mental health

declines, and other situations arise that often have negative consequence (Turcios-Cotto & Milan, 2012), This creates an opportunity for long-lasting contributions of 4-H positive youth development programs.

Statement of the Problem

Elbert County struggles with high school dropout and secondary education attainment. Even though this is true of many students in Elbert County due to low socioeconomic status, the Latino population especially suffers from poverty and low educational attainment (Villenas & Deyhle, 1999). The recent influx of Latinos in Elbert country warrants a closer look at how they can become academically successful.

Increasing the student success of at-risk or underserved youth requires a support system. Geoffrey Canada stated, “We’ve figured out that you’ve got to really design a network of support for these kids that in many ways mimics what a good parent does” (2013, par. 27). Canada made this statement while speaking about his successful graduation rate (100%) at the Harlem Children’s Zone who served students of all colors in the poverty stricken area. His success proves the value of establishing programs specifically for these youth. Even though much work is left to be done, Georgia was a top twelve state for increasing graduation rates in 2009 (Building a Grad Nation, 2012), signaling a step in the right direction.

4-H Positive Youth Development is a major player in the arena of student support and student engagement, According to Kress (2004), there are four

essential elements of 4-H; belonging, independence, mastery and generosity. A key component of positive youth development, and the belonging element of 4-H, is establishing an encouraging relationship with a caring adult. This youth-adult relationship is crucial to positive youth development (Libby, Rosen & Sedonaen, 2005) and can be linked to student engagement. Furthermore, 4-H'ers in middle grades are much more likely to be successful in school achievement, with higher grades and greater emotional engagement than non-4-H'ers (Lerner, Lerner, & Phelps, 2008). The Lerner study demonstrated that positive youth development is vital in assisting with student achievement (Lerner et al., 2008). Involving minority students in 4-H programming will increase student engagement, thus student achievement, and ultimately increase the graduation rate, which means these students will be more likely to continue their education. Not only does this benefit minority students directly, it also gives greater human capital to our country, strengthens our education system and improves society as a whole.

4-H programs in Elbert county are working to increase participation of all students, including currently underrepresented Latino students, To develop adequate and targeted programs, it is necessary to better understand the nature of student engagement among the county's youth.

Purpose of the Study

The purpose of this study was to examine engagement among students in the 7th grade at Elbert County Middle School and explore implications for 4-H

programming. To accomplish this purpose, the following research questions were addressed:

- Research Question #1: What are the demographics of the population studied in this research?
- Research Question #2: What is the value of each of the constructs of student engagement and overall student engagement among the respondents? How do the constructs compare with each other?
- Research question #3: Is there a significant difference in the overall measure of student engagement between the different demographic groups (racial/ethnic, living arrangements, and sex)?
- Research Question #4: Is there a significant difference between Latino, non-Latino White, and non-Latino Black/Biracial students in any particular construct measuring student engagement?
- Research Question 5: What is the value of each of the constructs of student engagement and overall student engagement among the Latino respondents? How do the constructs compare with each other in the case of Latino respondents?

By answering these questions, the researcher can better understand engagement and the role 4-H Positive Youth Development can play in the success of Latino students, from the middle school years through high school, analyze the implications of the data for 4-H programming and discuss how 4-H can assist student engagement beyond 7th grade.

Limitations of the Study

The conditions and factors affecting students, education, group relations, and society may change among schools and counties. Thus, the study may or may not reflect information, data or conditions that are relevant to other locations throughout Georgia and the United States. Additionally, the non-Latino White population of Elbert County, Georgia, may not compare to the dominant non-Latino White demographic used throughout the literature. Specifically stated, the non-Latino White students of Elbert County Middle School could be a lower achieving group than similar populations throughout the country.

The vast majority of Latino students in Elbert County (more than 90%) are of Mexican decent. Viewpoints and opinions of Latino students from other Spanish speaking countries may differ significantly from those captured in this study. For example, Latino students of Colombian heritage are the most likely group to obtain a college degree, whereas Salvadorans are the least likely to obtain any higher education (Motel & Patten, 2012).

The Elbert County 4-H Program is unique in that it meets with all students in 5th-8th grades during the school day, at designated class periods, in the public school. Many 4-H programs only meet 5th grade during instructional time, and other grades during “club time.” Therefore, information gathered in this study may be biased for a stronger 4-H relationship than with students in other counties, such as those who do not still participate in 4-H Club meetings during the 7th grade.

The original validity and reliability of the Student Engagement Instrument was studied using ninth grade students in an urban environment, with students from diverse ethnicities and economic backgrounds. However, for this study, the instrument was used with 7th grade students from a rural setting. While it is not probable, it is possible that the change of target population affects both reliability of the constructs and validity of the instrument. The instrument of use may also not account for needs or constructs specific to the location in which it was used..

List of Terms

- *4-H*: A positive youth development organization where “youth and adults learn, grow, and work together as catalysts for positive change” (Georgia 4-H). 4-H is a program area of Cooperative Extension.
- *Positive Youth Development*: When youth are able to grow into young adults by working with a caring adult and developing the six C’s: competence, confidence, connection, character, caring and contribution to others (Lerner, Lerner & Phelps, 2008).
- *Cooperative Extension*: Organization that works as a part of the land-grant system to “provide non-formal education and learning activities to people throughout the country” (National Institute of Food and Agriculture [NIFA], n.d.)
- *Extension Professionals/Agents*: People who carry out the mission of land-grant institutions, Cooperative Extension and 4-H by working with clientele at the local level through program development and education.

- *Active 4-H'ers*: Youth who participate in 4-H extra-curricular activities or competitions requiring multiple practices and which involves partnership with a caring adult.
- *Hispanic or Latino*: People who classify themselves as having origin from a Spanish speaking country (Merriam Webster Online). "Origin can be viewed as the heritage, nationality group, lineage, or country of birth of the person or the person's parents or ancestors before their arrival in the United States" (U.S. Census, 2015). While there is disagreement over the synonymy of these two terms and their appropriateness in different contexts, the researchers have used them interchangeably in this document.
- *Student engagement*: The time when students are actively participating in their learning; they are curious, expressive, open to new relationships and making progress towards success. According to the framework proposed by Appleton et al., "engagement is described as 'energy in action,' the connection between person and activity" (2006, p. 428).
- *Student achievement*: Obtained when the student has a positive experience in school (learning) and graduates from high school.
- *Youth-adult partnership*: a collaboration between students and an adult who work together for a common goal; student's voice is heard.

Summary

Positive youth development programs, such as 4-H, are essential to enhancing the learning process and engagement of students. Cooperative Extension has been a part of the process for over 100 years. Not only are students who participate in 4-H more likely to be engaged in school, participate in afterschool activities, give back to their communities, they are also twice as likely to attend college as non-4-H'ers. Increasing the diversity of 4-H participants will help diversify high school graduates, thus also expanding the demographic groups attending college.

Students in Elbert County represent the following demographic groups: non-Latino White (51%), non-Latino Black (36%), Latino (9%), Biracial or Multiracial (3%) and "other" (Asian, Native American) (1%). The poverty level in Elbert County is significantly higher than that of the state and the nation (23.4%, 18.3%, and 14.8% respectively) (U.S. Census Bureau, 2015). Roughly 78.5% of students throughout the county receive free or reduced lunch (Georgia Department of Education, 2015b). These statistics make Elbert County students more prone to high school dropout and a lower quality of life.

High school dropout is an issue across the country and in Elbert County. If students struggle in school or are not engaged in school, 4-H positive youth development can help strengthen their academic achievement.

CHAPTER TWO

REVIEW OF THE LITERATURE

Introduction

The purpose of this study was to examine student engagement among students in the 7th grade at Elbert County Middle School (rural Georgia) and explore implications for 4-H programming. In the literature review that follows, evidence is provided to show the importance of understanding student engagement, utilizing instruments to measure student engagement and increasing student engagement among students in the United States. The literature review examines the different types of engagement as described by Appleton et al. (2006), which include academic engagement, behavioral engagement, psychological engagement, and cognitive engagement, and presents the Student Engagement Instrument (SEI) (Appleton et al., 2006), used to collect data for this study.

Academic Achievement

Academic achievement is a precursor to student success in completing high school. According to the National Board for Professional Teaching Standards, student achievement is related to the amount of knowledge students have, how well they interpret that knowledge and then use the knowledge in a set

of skills (Linn et al., 2011). Most often student achievement is observed through tests or other quantitative measurements of a student's work. Many different factors can affect the achievement of students across the United States. Unfortunately, there is little that school systems can do to change some of these factors, such as poverty, housing, legal status, etc. However, schools can positively impact some important factors, such as student engagement, which warrants a more in-depth analysis. With a better understanding of engagement, teachers and schools may be able to develop and establish programs that can catalyze and support student achievement. As student achievement is viewed presently, the full effect of learning cannot be measured. Total classroom learning cannot be reduced to a standardized test or a scoring rubric. Instead, researchers have moved toward studying student engagement, which is perhaps a better lens of how well students are actively learning. Evidence suggests that it is appropriate to relate student engagement to overall school performance and prevention of high school dropout (Appleton et al., 2006). Enhancing student engagement is also a means in which County Extension Agents can assist the students and teachers in their counties.

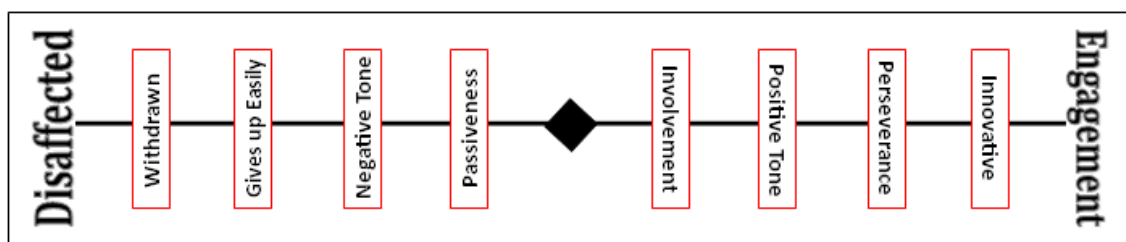
Student Engagement

Over the past several decades, student engagement has been the theoretical focus of researchers trying to understand and address the high school dropout. Student engagement is believed to have a significant correlation to student achievement, and thus school completion. The Merriam-Webster Online

Dictionary defines engagement as “the act of engaging.” Engaging is defined as “tending to draw favorable attention or interest.” Engagement is much like kinetic energy; proper engagement means action or work, energy must be expelled. The research team led by Appleton (2006) further stated that “engagement reflects a person’s active involvement in a task or activity” (p. 428). Therefore, student engagement is the result of a student showing attention or interest in their abilities, tasks, learning process and overall education.

While student engagement may seem simple in theory, the actual measurement can be quite difficult. Scholars have described different components of student engagement, and many different ways to measure those components. During the early years of student engagement research, it was thought of only as an observation of a student’s behavior. This level of engagement was measured as perceived by the instructor, not self-reported by the student. The participation-identification model of student engagement was another original theory in which only two subtypes of engagement, behavior and emotional, were included (Fredricks et al., 2011). James P. Connell postulated key engagement theory. Connell used a model in which students were measured on a continuum from engagement to disaffected (Connell, 1990). Figure 2.1 explains the Connell model in more detail. Students who are engaged are likely to exhibit qualities and behaviors quite opposite of those who are disaffected.

Engagement Continuum based on Connell's Model



(Modified from Connell, 1990)

Figure 2.1. Engagement Continuum based on Connell's model.

More recent research on student engagement added a cognitive component to the discussion of subtypes. Appleton et al. (2006) showed that research in the area of student engagement included mostly three different subtypes of engagement: behavioral, cognitive and emotional, and added academic achievement in his own model.

Importance of Using Student Engagement

Student engagement has become a topic of discussion among researchers and educators for several reasons. For one, student engagement is linked to the learning outcomes of students in an academic context, and has emotional and social significance (Lovelace, 2013). Student engagement has been shown to predict high school dropout as early as the elementary school years (Grier-Reed et al., 2012). Additionally, focus on increasing student engagement is seen as a potential remedy to combat the current high school dropout crisis in the United States. According to the work of Fredricks et al.

(2011), increasing student engagement is a means to keeping students in school while maintaining a better grade point average and scoring higher on standardized tests. Disengaged students are much more likely to become high school dropouts, which leads to many more negative outcomes to the individual and community. Student engagement has actually been noted to be a quality predictor of academic success and whether or not a student will graduate high school (Lovelace, 2013). Engagement is influential and can be changed through proper enhancement. Measuring and understanding student engagement can give school districts necessary information to oppose disengagement and establish intervention programs to increase positive engagement. With a valid measurement of student engagement, school districts or professionals working with student achievement will be able to make decisions on how to help student performance, respond proactively to issues within the district, plan intervention methods, target school wide issues and identify students who are at-risk for not completing high school (Lovelace, 2013). In order for learning to occur, the student must initiate the educational process (Pappa, 2014), which means monitoring engagement of the student is essential to learning.

Ways of Measuring Student Engagement

Student engagement, or disengagement, is not one simple event that can be captured through one simple measurement. Instead, it is multifaceted. While Appleton et al. (2006) first acknowledged three engagement subtypes, later in his work he proposed a four-construct model. Appleton et al. (2006) indicated that “in

our taxonomy, engagement is viewed as a multi-dimensional construct comprised of four subtypes: academic, behavioral, cognitive and psychological” (similar to emotional) (p. 429). Therefore it is important that efforts to measure engagement integrate all four subtypes through the use of different types of measurements, and variables or constructs within instruments.

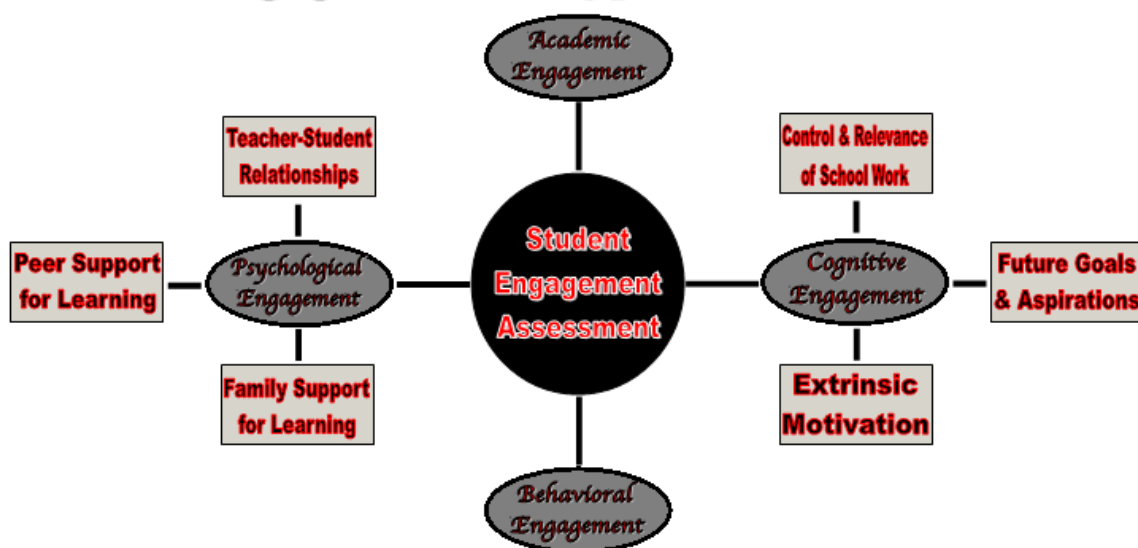
There are three common ways of measuring student engagement: student self-report, teacher report and observational measures (Fredricks et al. 2011). Student self-report instruments seem to be the most common or frequently used type of measurement in formal research; and, perhaps, may be the most valid representation of the engagement level for that individual. Two-thirds of the engagement assessment instruments reviewed by Fredricks et al. (2011) were self-report measures. To some, a teacher report instrument of engagement has the potential to be less legitimate than the student report. For instance, students who have a negative relationship with their teachers are more likely to be scored as having lower engagement than students who have a positive relationship with the teacher (Decker, Dona, & Christenson, 2007). Both student self-report and teacher reports are simple to conduct; however, observational measures must be done completed by a trained observer and therefore may not be as easily acceptable in most situations.

Conceptual Framework of the Study

Not all items used to measure student engagement are created equally. Fredricks (2011) noted that engagement sub-types are not all used the same

between researchers and instruments. For example, different researchers or methods may focus on just one of the engagement subtypes set forth by Appleton et al. (2006): cognitive, psychological, behavioral and academic engagement. In fact, Appleton et al. (2006) focused their research on student self-reports that measured cognitive and psychological engagement subtypes only arguing that these constructs are more internal in nature whereas the other two (academic and behavioral) are more easily observed by the teacher, and more often addressed. All four subtypes of engagement are equally important. The engagement model developed by Appleton et al. (2006) is used as the conceptual framework for this study. Likewise, the Student Engagement Instrument developed by Appleton et al. (2006), and further validated by Lovelace (2013) was used to collect the data for this study.

Student Engagement Subtypes & Constructs of SEI



(Modified from Appleton et al., 2006)

Figure 2.2. Appleton et al. (2006) recognized four common subtypes of student engagement: academic, cognitive, behavioral, and psychological. Two of them, Psychological Engagement (teacher-student relationships, peer-support for learning, and family support for learning), and Cognitive Engagement (control and relevance of school work, future goals and aspirations, and extrinsic motivation), are the constructs of the Student Engagement Instrument, which was used in this study.

Figure 2.2 exemplifies the four common subtypes of student engagement according to Appleton et al. (2006): academic, cognitive, behavioral and psychological. The Student Engagement Instrument developed by Appleton et al. (2006) focuses on two of these particular engagement subtypes; psychological and cognitive engagement subtypes (Appleton et al., 2006). Each of the subtypes integrates several variables or constructs, as shown in Figure 2.2.

Cognitive and psychological engagement have both been measured through observation of a student's behavior successfully; however, allowing students an opportunity to self-report their perception is more useful to understand the student's viewpoint and how they are connected to the school environment around them (Appleton et al., 2006). Therefore, Appleton and team (2006) worked to create an instrument to measure cognitive and psychological engagement from the student's angle. Appleton et al. (2006) chose to address just cognitive and psychological engagement because the SEI was intended to complement observational engagement conducted by teachers in the classroom for behavioral and academic subtypes. The researchers wanted an instrument to collect data from a student's internal school experience to be combined with those observational measures in determining effective engagement of the student, teacher, school and district (Lovelace, 2013).

The Student Engagement Instrument (SEI) was developed after an extensive review of literature (Appleton et al., 2006). When a review of the SEI was completed, it was found that the instrument could be used to conduct research on high school dropout, evaluate forms of intervention, monitor the teacher, student, or school district, and diagnose potential effects at the student level (Fredricks et al, 2011).

The Student Engagement Instrument uses a Likert scale to capture information on the following constructs: teacher-student relationship (psychological), control and relevance of school work (cognitive), peer support for learning (psychological), future aspirations and goals (cognitive), family support

for learning (psychological), and extrinsic motivation (cognitive). The Items (statements) used in the instrument can be found in Table 2.1 along with the corresponding construct and type of engagement measured. According to Appleton et al. (2006) there is clear evidence to support a link between levels of engagement and student outcomes. Due to the reliability (calculated through Cronbach's alpha) and validity (face validity, meaning) of the SEI, as well as its potential use as a predictor of high school dropout, it was decided the SEI was an appropriate instrument to use in this study. Furthermore, a student's internal (cognitive and psychological subtypes) self-reported beliefs are more important for established 4-H positive youth development programming to meet the needs of those students.

Table 2.1. *Items (Statements Used for Student Self-Report) in the Research Instrument Along with the Corresponding Construct and Type of Engagement Measured.*

#	Item on Student Engagement Instrument	Construct Name	Engagement Type
1	My family/guardian(s) are there for me when I need them	Family Support for Learning	Psychological Engagement
12	When something good happens at school, my family/guardian(s) want to know about it		
20	When I have problems at school my family/guardian(s) are willing to help me		
29	My family/guardian(s) want me to keep trying when things are tough at school		
3	My teachers are there for me when I need them	Teacher-Student Relationship	
5	Adults at my school listen to the students		
10	The school rules are fair		
13	Most teachers at my school are interested in me as a person, not just as a student		
16	Overall, my teachers are open and honest with me		
21	Overall, adults at my school treat students fairly		

22 I enjoy talking to the teachers here			
31 At my school, teachers care about students			
39 I feel safe at school			
4 Other students here like me the way I am			
7 Students at my school are there for me when I need them			
23 I enjoy talking to the students here			
24 I have some friends at school			
37 Students here respect what I have to say			
40 Other students at school care about me			
2 After finishing my schoolwork I check it over to see if it's correct			
9 Most of what is important to know you learn in school.			
15 When I do schoolwork I check to see whether I understand what I'm doing			
25 When I do well in school it's because I work hard			
26 The tests in my classes do a good job of measuring what I'm able to do			
28 I feel like I have a say about what happens to me at school			
33 Learning is fun because I get better at something			
34 What I'm learning in my classes will be important in my future			
35 The grades in my classes do a good job of measuring what I'm able to do			
8 My education will create many future opportunities for me			
11 Going to school after high school is important			
17 I plan to continue my education following high school			
30 I am hopeful about my future			
38 School is important for achieving my future goals			
18 I'll learn, but only if the teacher gives me a reward			
32 I'll learn, but only if my family/guardian(s) give me a reward			

*Peer Support
for Learning*

*Control &
Relevance for
School Work*

**Cognitive
Engagement**

*Future Goals
& Aspirations*

*Intrinsic
Reward
(reverse
code)*

Cognitive Engagement

In her book, Dr. Payne (2005) states that teaching occurs outside of the head, learning occurs inside the head. In order for students to learn and to excel academically, cognitive engagement must happen inside their heads. Cognitive

engagement may be exhibited through the goals and investments to learning, including study habits, willingness to take on a challenge, managing distractions, attainment of goals and exceeding on quality of work of a student (Lovelace et al., 2014; Appleton et al., 2006). Fredricks et al. (2011), state that cognitive engagement is essential for mastery in skill performance and comprehension. It has also been noted that cognitive engagement includes valuing, self-regulation, mastery orientation, self-efficacy and goal setting (Christenson, Reschly & Wylie, 2012).

Cognitive Engagement – Future Goals and Aspirations

Cognitive engagement seems to start a steady decline in the 9th grade according to the longitudinal study on the Student Engagement Instrument in Gwinnett County. In the Lovelace et al. (2014) study of validity and reliability for the Student Engagement Instrument, it was noted that students foretold their own future towards dropout or graduation with surprising reliability (a measure of consistency). This construct carries the greatest weight for predicting high school dropout. Students who have no goals for the future, low aspirations, low achievement and less participation in school and other activities are much more likely to become high school dropouts (Christenson, Reschly & Wylie, 2012).

Motivation may be the internal driving force that allows a student to establish goals for the future (Christenson, Reschly & Wylie, 2012). Students who consciously think about the future and make plans to have the future they desire are much more likely to score stronger in cognitive engagement.

Sometimes, students may be motivated by situational problems to achieve greater goals or aspirations in life. Interestingly, Christenson, Reschly & Wylie (2012) found that in some cases a student's self-reported score for the future goals and aspirations construct outpaced reality. For example, students who are given the Student Engagement Instrument at the elementary or middle school level may have high goals and aspirations, but eventually end up as a high school dropout regardless. Nonetheless, this construct still carries significant importance of predicting the future. Students who achieve low scores will be more likely to become dropouts.

Cognitive Engagement – Control and Relevance of School Work

Control and relevance for school work as perceived by the student can affect their engagement levels. For example, the emphasis that a school places on academic achievement can push a student to achieve more or pull him or her down into failure (McNeal, 1997). A very high expectation of student achievement can cause students to become frustrated with school; too little expectation can cause students to become bored. Schools should strive to find the right balance of control and relevance of school work to push students' ability without frustrating them to the point of no longer caring. Pressing students to perform well is a must, but not to the extreme of forcing dropout.

Students benefit when they do have some control over the content taught. For instance, project based learning is an excellent way for students to learn while controlling the end result of the project. Christenson, Reschly & Wylie

(2012) argue that in order for students to grow into well-articulated people, they should have the opportunity to explore material applicable to their own interest, which increases the relevance of the content to the student. If students feel as though the material they are being asked to learn isn't applicable to their own life, they are more likely to become disengaged. Teachers can help increase the control for relevance of school work construct by allowing student ownership of the class, choosing topics to be covered and using project work to teach concepts.

Cognitive Engagement – Extrinsic Motivation/Intrinsic Reward

The extrinsic motivation was reverse coded to address intrinsic reward. Extrinsic motivation comes from an external environment, outside the student, such as rewards, money, prizes, grades, etc. Intrinsic motivation, on the other hand, comes from within the student, such as a personal drive to achieve or satisfaction from learning. Intrinsic motivation is accredited to creating life-long learners (Center for Excellence in Teaching, n.d.). Research has shown that intrinsic motivation generally decreases over time as students move from elementary school into middle school and then high school (Christenson, Reschly & Wylie, 2012). Unfortunately, over time students tend to lose their curiosity for learning, perhaps because of the way teaching in the public school system is conducted.

Schools and teachers can actually strengthen intrinsic motivation by making sure the classes are well planned and organized, teaching content in an enthusiastic manner, caring for the students and their achievement, communicating attainable goals with students, allowing students the opportunity to succeed, giving immediate and honest feedback, keeping a safe learning community in the classroom, understanding the interests of students, using positive peer learning groups, sharing the ideal work or assignment with students, using a variety of teaching methods, avoiding competition between students but encouraging competition against one's self and rewarding students publicly (Center for Excellence in Teaching, n.d.).

Psychological (Affective or Emotional) Engagement

Psychological engagement, also known as affective or emotional engagement, is evident through students' interests, peer group, family support and overall attitude concerning life/education (Lovelace et al., 2014; Appleton et al., 2006). The rate at which students interact with others at the institution affects their enthusiasm towards their studies or work (Fredricks et al., 2011). Variables such as school pride, comfort level and amount of assurance received can be linked to psychological engagement as well (Pappa, 2014). Students should feel as though they have strong membership or buy-in to the program. Other attributes of this engagement subtype can include: enthusiasm, boredom, interest, disinterest, enjoyment, frustration, satisfaction, sadness, worry, anxiety, vitality, shame and passion (Christenson, Reschly & Wylie, 2012).

Psychological Engagement – Teacher Student Relationship

Teacher student relationship is one construct under the psychological engagement subtype. During the longitudinal study in Gwinnett County, it was found that the level of engagement for teacher student relationship construct decreased significantly when students entered middle school (Lovelace, 2013). This could be partially due to the change in the systematic schedule of the day and the fact that student peer groups start becoming more valuable in a student's perspective and the adult relationship less important. In the Grier-Reed et al. (2012) study, it was also noted that the teacher student relationship could affect the anxiety level and external conflict of the student. External conflict has to do with how well a students feel like they are supported in their academic work or how repressed they may feel from instructors.

The ratio of students to teachers can greatly affect how a student perceives teacher-student relationship. A teacher with a larger class size will not be able to give students the same amount of attention as that of a teacher with a much smaller class size. Schools with larger student-teacher ratios are much more likely to lose students to dropout (McNeal, 1997). For this reason, reducing the class size can improve the teacher student relationship construct by strengthening the relationships that students have with their teachers, which will in turn help hold students accountable for their academic attainment.

The academic environment of a school can also affect the teacher student relationship. For instance, schools or classrooms that implement caring adults and create an environment of inclusiveness and nurturing can decrease dropout

numbers (McNeal, 1997). Pappa (2014) found that the more supportive a teacher was of students, the more likely the students were to become active, engaged participants at school.

Psychological Engagement – Family Support for Learning

Family support for learning is an important component of students receiving the support and nurture needed to be successful. Every human has a need to feel as though they belong, which is why the National 4-H Center lists belonging as an essential element of 4-H (Kress, 2004). Families are the most primitive form of belonging. Pappa (2014) states in her work that every person has a need for belonging, love, acceptance, attachment, approval and recognition. Families are essential in fulfilling that need. When those needs are not met at home, a student will become needy or exhibit behaviors to cause attention elsewhere. Since the family situation of a student can rarely be changed by educators, it is important to strengthen the student's level of engagement through other avenues (Appleton et al., 2006).

Parents who value education and support their children in learning greatly increase the odds that their children will graduate high school. Also, parents who are involved with the school and monitor their student's success significantly reduce the chance that their children will drop out (Christenson, Reschly & Wylie, 2012). In order for students to have high levels of family support for learning, their parents should be able to help them with homework, talk to them about

school and motivate them to carry on their academic career (Christenson, Reschly & Wylie, 2012).

Psychological Engagement – Peer Support for Learning

Peer support for learning interestingly maintained a relatively constant score throughout the longitudinal study in Gwinnett County. Peer support for learning is very important for students transitioning into higher education. The Grier-Reed et al. (2012) study noted that strong peer support as a freshman in college is particularly important for students who were first generation college goers, from a minority demographic group or an immigrant student.

While good peer support for learning is a strong attribute to student engagement, students who associate with negative peers can actually be adversely affected by peer support. In McNeal's (1997) work, he found that even when schools put students in similar peer groups their achievement can be restrained. For instance, classes with varying levels of students may actually restrain the performance of children who are more capable or more engaged than some of their classmates. However, when students choose their peer groups instead of teachers, they are more likely to join groups who share the same engagement level as they do (Christenson, Reschly & Wylie, 2012).

Behavioral Engagement

Behavioral engagement can be viewed in the ways students interact with others, follow instructions given, participate in class discussions/extra-curricular activities, attend school, classroom demeanor or disruptive behavior (Lovelace, Reschly, Appleton & Lutz, 2014; Appleton et al., 2006). According to Fredricks et al. (2006), behavioral engagement is imperative to keeping students in school and obtaining academic success. Behavioral engagement is the most proficient subtype at predicting the future outcome of a student (Lovelace, 2013).

Concentration level, the persistence to finish a task and attention span are all attributes that can be attributed to behavioral engagement (Pappa, 2014).

Students who take advantage of extra credit work generally have higher levels of behavioral engagement. Participating in after-school programs or extra-curricular programs is also linked to behavioral engagement. Other attributes which can be linked to behavioral engagement include: action initiation, passivity, effort, absorption, intensity, withdrawal, inattentiveness, easily distracted, unprepared, task management or planning and self-handicapping (Christenson, Reschly & Wylie, 2012).

Academic Engagement

Academic engagement can be observed through completing tasks or homework, grade averages, performance on standardized tests, etc. (Appleton et al., 2006). The effort used to earn enough credit hours for graduation can be viewed as a part of academic engagement (Pappa, 2014). Academic engagement is a relatively new subtype of engagement, as it is very closely

related to behavioral engagement (Christenson, Reschly & Wylie, 2012). For instance, time on task, attention to learning, putting forth effort into the learning process are all components of academic engagement as well as behavioral engagement. Most researchers who study student engagement do not use an academic subtype (Christenson, Reschly & Wylie, 2012; Fredricks et al., 2011).

The Student Engagement Instrument in Action

In the initial construction of the Student Engagement Study, Appleton et al. (2006) used a focus group of thirty-one, ethnically diverse, randomly selected 8th graders from different school districts to pilot the instrument. It was then used with students located in the northern Midwest region of the country. The participants were 9th graders from one school district in an urban setting and represented the following demographic groups: White, Black, Asian, American Indian and Latino. The population size was very large, compared to the Elbert County sample, with 1,931 participants. During this initial study, the researchers determined which items needed to be deleted from the instrument and how many constructs should in the instrument. Three versions of the instrument existed, one with four constructs, one with five constructs and one with six constructs. The end results showed that the constructs were reliable and validity of the six-construct model to represent engagement was better supported (Appleton et al., 2006).

A longitudinal study using the Student Engagement Instrument has been conducted by Gwinnett County Public Schools in Georgia. Gwinnett County is an

urban area outside of the Atlanta metro area. Gwinnett County has used the instrument since 2007, and has continued to administer it to students every spring and fall (Lovelace, 2013). Using information provided by Gwinnett County schools, Lovelace was able to determine the re-testability of the Student Engagement Instrument. An interesting finding from this study was that, overall, students declined at similar rates over the years but the range of levels at which they started was wide. Furthermore the predictability of the instrument to project dropout was studied.

In order to analyze the effectiveness of the Student Engagement Instrument with other age groups, it was tested with students in each grade 6th through 12th grades in a study by Betts, Appleton, Reschly, Christenson & Huebner (2010). Over three hundred students per grade level completed the instrument. Students were in South Carolina and Minnesota and represented the following demographic groups: White, African American, Asian American, Hispanic American, Native American and "other." This study looked at the four factor and five factor models of the Student Engagement Instrument and determined they were good fits. According to Betts et al. (2010), the instrument measures the intended purpose appropriately across all grade levels and across genders. Engagement subtypes were similar across the groups who came from such diverse backgrounds (rural South Carolina, urban Minnesota).

Grier-Reed, Appleton, Rodriguez, Ganuza & Reschley (2012) further studied the Student Engagement Instrument by using it at the collegiate level. One-hundred-twenty-two students were given the instrument. All students were

taking introductory classes in the College of Education at a large university in the Midwestern region of the country. The following ethnic/racial groups were represented in the sample: White, African American, Asian American/Pacific Islander, Latino, African immigrant or other (Biracial, Arab, Indian, and Middle Eastern or Egyptian). This study used the four factor model of the Student Engagement Instrument instead of the six factor model. The constructs for this model were: teacher student relationship, peer support at school, future aspirations and goals, and family support for learning. In addition to determining that the Student Engagement Instrument is a worthy tool for measuring engagement at the collegiate level, researchers also determined there was a strong correlation between peer support for learning and grade point average, and teacher student relationship to anxiety and external conflict (Grier-Reed et al., 2012). This study also mentioned that using the Student Engagement Instrument predicted a higher level of career choice among students who were more engaged.

The Student Engagement Instrument is becoming more and more prevalent as school districts across the country use it. Unfortunately, there is not one central location where all data from the instrument can be located. However, research can be found where the instrument was implemented in Georgia, Minnesota and South Carolina. Oregon has also starting using the Student Engagement Instrument (Braun & Smith, 2011). Furthermore, the instrument has been used in other countries. As a matter of fact, the Student Engagement

Instrument has even translated into at least two known languages, Portuguese and Greek (Pappa, 2014).

Factors Affecting Student Engagement

Poverty

At the very heart of the public school system is the desire to bring quality education to every child in the country. Statistics have shown that the quality of life improves with more education, but yet we still have a large percentage of children living in poverty. Poverty can affect all races, in all regions of the world; however, in the United States, Latino and African American children are twice as likely to live in poverty as white children (Payne, 2005). The educational gap between high-income families and low-income families is not only alarming, but also growing (Center, Rassen & Gunderson, n.d.). Unfortunately, the students who grow up in poverty are much more likely to become adults living in poverty; a cycle that is hard to break and sometimes referred to as generational poverty. Appleton et al. (2006) states that empirical research exists to acknowledge a relationship among student engagement levels, success in school and attitude towards school is relevant to or affected by the socioeconomic status of students. Students who live in a low socioeconomic status are six times more likely to drop out of high school (Center, Rassen & Gunderson, n.d.).

Although school may not be able to fix all the problems associated with poverty, education can help one move out of poverty (Payne, 2005). In many cases, the issue is with poverty, socioeconomic status, child hunger and housing

problems that students face and not necessarily the education available to them. According to Center, Rassen and Gunderson (n.d.), all schools should work to become a cohesive educational system able to provide positive experiences and enrichment opportunities for all students regardless of their socioeconomic status. For this to happen, schools must work with communities and businesses to bring opportunities and services to the youth, such as health care (mental & physical), afterschool programs, food, mentoring, tutoring and parent engagement. Early childhood preparation, general health and after-school or summer programs are three factors that can greatly enhance a student's academic success but are limited when growing up in poverty (Center, Rassen & Gunderson, n.d.).

Student Disengagement

Many different things can affect the engagement level of a student in addition to poverty. Engagement, or lack thereof, can be both an individual decision and/or a system-wide failure. Deversi and Mecham (2005) noted that many immigrant and minority students struggle in American schools. Some factors that may inhibit high levels of engagement include the following: legal status or citizenship, loss of close relationships, poverty, race, language, acculturation, identifying to a new ethnic label, changing individual roles within the family, parent involvement, nature of the communication and collaboration among teachers/parents/school, teacher attitudes and student-teacher relationships, teaching resources, student/school security, school leadership,

cultural differences between teachers and students, and standard based teaching (McCoach et al., 2010; Moreno & Gaytan, 2013; Perez et al., 2009; Pianta, Hamre, & Allen, 2012). Furthermore, those students who become frustrated with low attainment, must work in addition to attending school, come from single-parent homes, are older in age, male and from a minority demographic are also more likely to not graduate high school (McNeal, 1997). Other factors that could prevent graduation include: living in an urban setting, substance abuse, inability to accept authority, reside in the southeastern or western regions of the country, have lower self-esteem or confidence, be more impulsive and have difficulty expressing themselves (Christenson, Reschly & Wylie, 2012).

An individual look at disengagement brings up at-risk youth (those who are at-risk for not completing high school). There are many different viewpoints towards who is considered at-risk. Earlier criterion mentioned included: low socioeconomic status, hunger, housing problems, race, ethnicity and English language learners. Disadvantaged youth often times from single parent families as well (McNeal, 1997). Other individual effects on a student's behavior in school includes their involvement with family, church, friends, community organizations and extracurricular activities (McNeal, 1997). Males are also less likely to graduate. Students who take adult responsibilities such as employment or become pregnant are more likely to become disengaged (Christenson, Reschly & Wylie, 2012).

Student disengagement at school can occur because of the way a system operates. A single school district has great influence over the level of student engagement, as well as the significance placed by the state's Board of Education. The communication of teachers with parents, levels of collaboration, resources available, school security, leadership of the system, a difference in culture among teachers and students, poor teacher attitude and standard based teaching are some of the system wide problems that inhibit student engagement. McNeal (1997) goes on to state that the school size, academic climate, teacher-student ratios, specialization and teaching intensity can affect student engagement. For example, a larger school size is worse on student engagement because students get lost in the commotion and cannot engage as easily as in a smaller school environment.

The Dropout Crisis

According to Christenson, Reschly & Wylie (2012), students who are engaged participants achieve success and therefore graduation whereas students who are non-participants (disengaged) have poor academic achievement and thus withdraw (dropout). During this century, youth cannot afford to not achieve academic success, particularly high school graduation. The economic significance of graduating high school and obtaining skills for college or work is tremendous (Lovelace et al., 2014). According to the work of Appleton et al. (2006), student engagement is directly correlated to high school dropout and high school graduation. If this correlation is apparent, then much work can

be done through positive youth development and partnerships between 4-H professionals and school employees to monitor student engagement or disengagement. Positive youth development programs can help reduce the levels of disengagement seen in students, which typically starts well before high school (Lovelace et al., 2014). 4-H generally starts in the 5th grade, as students begin their transition into middle school and adolescence. Identifying student disengagement during these years and developing positive youth development programs to combat the problem is essential for increasing high school completion rates.

The dropout crisis did not occur overnight. Students begin disengaging from their education long before 11th or 12th grades. Student engagement assessments may provide insight into the dropout phenomenon and assist in combatting the problem. In fact, positive student engagement may actually increase graduation numbers. Not only will monitoring student engagement help researchers understand the dropout phenomenon, but will also provide information to allow for intervention when students show signs of becoming disconnected from their academic work (Appleton et al., 2006). Lovelace et al. (2014) examined research that tracked students over multiple years and shows the correlation between higher student engagement and the increased chance of high school graduation. Also according to Lovelace et al. (2014), high school dropout does not happen independently; instead it is the result of many separate events throughout the student's school career leading to a slow recession of school engagement. Students who are more likely to fail in school need to have

deliberate measurements of the cognitive and psychological subtypes of student engagement throughout their school years (Appleton et al., 2006). Unfortunately, minorities have the greatest risk of high-school dropout and often they have less access to intervention programs to enhance engagement.

4-H Positive Youth Development

Given the trending numbers of Latinos in the United States, the 4-H program, from the grassroots level all the way to national level, must be in a position to assist and manage the positive development of Latino youth (Jones et al., 2013). While the many benefits of 4-H positive youth development have been documented from the local level all the way to the national level, many children and families (especially minority families) do not grasp, nor understand, the opportunity afforded to them (personal communication, 4-H Latino students). Many people of color or ethnic minorities, including but not limited to Latino youth, do not participate in 4-H programming for the unfortunate stigma of a (non-Latino) White-only youth development club or organization (Jones et al., 2013). Diversity within 4-H programming is extremely important; the impact 4-H can make on an individual's life is vital. As a matter of fact, lack of afterschool programs and summer camping programs like what 4-H offers can account for up to 66% of the achievement gap by the time a student reaches 9th grade (Center, Rassen & Gunderson, n.d.). Further, engaging a diverse and socially disadvantaged audience in 4-H programming assists in meeting the mission of

the organization and the pledge to make the best better throughout the country and the world (Jones et al., 2013).

According to the Lerner et al. (2013) study performed at Tufts University, the benefits of being actively involved in 4-H includes: the likeliness to contribute back to communities, becoming more engaged civically, making healthier choices, spending time in science, engineering and technology outside of school time, the drive to participate in science programs, higher levels of student achievement and student engagement, greater motivation and goals for the future, lower substance abuse (drugs, alcohol, tobacco), increased academic competence, improved exercise routines and greater chance to attend college. While these are not the only benefits of 4-H, it was found that 4-H'ers excel in these areas compared to non-4-H youth. When parents of 4-H'ers who attended camp were surveyed, they reported the following items increased after the 4-H program: child was more likely to take care of his own belongings, greater shared work responsibility, took more initiative to complete tasks, took more responsibility for his actions, deals with both success and failure better, more positive mental attitude and greater ability to adapt to change (Garst & Bruce, 2003).

Targeted recruitment is a best practice method for recruiting minorities into post-secondary education. 4-H'ers are two times more likely to attend college than non 4-H youth (Lerner et al., 2013). 4-H programs can play a major role in practice by getting minority or at-risk students interested at an early age. For instance, researchers suggest that a program be established to sustain

engagement and recruitment as early as pre-kindergarten and continue up through high school encouraging students and helping them learn how to be successful in grade school and apply themselves towards higher education (Miller & Garcia, 2004). One of the main purposes of 4-H is to create young people with an appreciation for learning and to expose these young people to college, specifically land-grant universities. The most logical approach to reaching, recruiting and retaining Latino students – from elementary through collegiate levels – is for 4-H to be a part of their lives.

simply Matthew) is one of the four canonical gospels, one of the three synoptic gospels, and the first book of the New Testament. The narrative tells how the Messiah, Jesus, rejected by Israel, finally sends the disciples to preach his Gospel to the whole world.[1]

Dr. Payne (2005) stated in her book that relationships are the single most important factor for helping children get out of poverty, along with education. These two items have had a root in 4-H programming since its conception. Having an adult to look up to as a role model and a mentor is an extremely vital part of the educational continuum. Mentoring is at the very heart of the 4-H model, where adults and kids work and learn together. A positive relationship with a caring adult from a different ethnic/racial group can promote higher goals and aspirations for the future, greater thinking on multiple levels and a stronger identity (Diversi & Mecham, 2005). When a child has a positive relationship with a caring adult through 4-H, they are benefiting from the mentoring process. 4-H summer camp is a prime example of how positive youth development can help

students build relationships with both peers and adults. This method of adult and peer support meets one of 4-H's four essential elements, belonging.

Miller & Garcia (2004) added that quality programs reaching disadvantaged youth did not just occur during the classroom hours, but also encompassed time spend outside of the classroom during the school year. 4-H prides itself in using "hands-on" learning throughout the year. Students can develop necessary skills through personal projects which most often do not fall within the realm of traditional subjects but rather outside of standard curricula (Marzano & Pickering, 2011). Whether through local 4-H programming or state-wide camps, 4-H'ers have an opportunity to learn research-based information through hands-on activities. 4-H'ers are given opportunities to put their hypothesis to the test and create their own research. Occasionally, they even have the opportunity to participate in research from their land-grant institution at an early age.

4-H plans and prepares activities based on four essential elements. Those essential elements are belonging, independence, mastery and generosity. Belonging encompasses "a positive relationship with a caring adult, an inclusive environment, and a safe environment" (Kress, 2004, p. 1). Learning independence gives students a chance to make their own decisions and participate in a level of their choice in different activities (Kress 2004). Mastery gives students an opportunity to research and teach on a topic of their choice. Not only do 4-H'ers become "masters" in an area, specifically through Project Achievement, mastery also involves student engagement in a hands-on way

outside of a traditional classroom. Since producing contributing citizens is a mission of the 4-H program, generosity is also an important essential element. Through generosity, 4-H'ers learn the importance of giving back to their community and serving others.

The significance of using this instrument with 7th grade students can be attributed to the 4-H program levels. Four age levels exist for 4-H positive youth development programming. In Elbert County, “cloverbuds” are students in kindergarten through fourth grades; “cloverleafs” are students in fifth and sixth grades; “juniors” are students in seventh and eighth grades; and “seniors” are students in the ninth through twelfth grades. The largest drop in 4-H participation occurs over the middle school years. Determining what is happening with seventh grade students can greatly influence the type of programming needed in the 4-H program to retain all junior 4-H'ers.

Summary

Not one single construct can measure student engagement and predict the future academic success of a student. Keeping students engaged takes a combined effort from teachers, educators, program leaders and parents. Student disengagement is not a sudden affair, but something that happens gradually throughout the school career of a student. Typically engagement is stronger during elementary school years, starts dropping through the middle school years and becomes its lowest in the high school years (Decker, Dona, & Christenson, 2007). Measuring engagement throughout the school years can prove beneficial

to monitoring students' path to achievement, or on-time graduation. Even though more concentration has been placed on academic and behavioral engagement subtypes, evidence exists to link the importance of cognitive and psychological engagement to student outcomes (Appleton et al., 2006). Therefore, using the Student Engagement Instrument is necessary in this study. Understanding the engagement level of students will allow for appropriate programs targeting identified student needs and situations. 4-H should be able to assist with greater student engagement, leading to better student achievement and ultimately graduation from high school (maybe post-secondary school as well).

CHAPTER THREE

METHODS & PROCEDURES

Introduction

The purpose of this study was to examine student engagement among students in the 7th grade at Elbert County Middle School (rural Georgia) and explore implications for 4-H programming. The research questions are answered by analyzing the archival data from the Student Engagement Instrument completed by 7th grade students in Elbert County. These data will be instrumental in planning and implementing a 4-H positive youth development program to meet the need of the student population in Elbert County.

Research Design

This research project used existing or archival data. The Student Engagement Instrument was initially administered by the researcher (also the 4-H agent in Elbert County) to 7th grade students for the purpose of planning and improving the 4-H positive youth development program in Elbert County. Measuring student engagement at the 7th grade level is important for junior 4-H'er retention. The researcher chose to use the Student Engagement Instrument created and tested by Appleton et al. (2006) and published in the *Journal of School Psychology*. This instrument was chosen because of the validity and

reliability, as well as applicability, proven by the scholars who developed the program, and additional researchers after them (Appleton et al., 2006; Betts et al., 2010; Grier-Reed et al., 2012; Lovelace, 2013; Lovelace et al., 2014). Using this existing assessment allowed for the capture of information in regards to student engagement levels, specifically cognitive and psychological, for all 7th grade students in Elbert County Middle School. This is particularly important because the 4-H Agent is not in the classroom full time (only one day a month) and cannot measure engagement through observation. Plus, getting the students' opinion and reflection on how they feel is of greater use in developing out-of-school, positive youth development programming specific to the audience than using teacher's opinions on student engagement.

The instrument has forty statements presented on a Likert scale with four possible answer choices, ranging from strongly disagree (1) to strongly agree (4). Thirty-five items are from the original SEI; five items were added specifically for this study. The following constructs were measured by the instrument: family support for learning, intrinsic reward, teacher-student relationship, control and relevance of school work, peer support for learning and future aspirations and goals. To achieve consistent and reliable measures, each construct should include several data points or items. During the original framework of Appleton et al. (2006), each construct was found to be reliable (as measured with coefficient alpha), although one construct (intrinsic reward) only had two items. Furthermore, the Lovelace team (2014) addressed the predictive validity of the

instrument in another study. Before collecting the data in Elbert County, an additional construct (4-H relationship) was created.

Before continuing with the analysis for this study, all constructs were re-assessed for reliability using the Cronbach's alpha with the 7th grade students in Elbert County (items and constructs of the instrument are detailed in Figure 2.3). At that time, the researchers decided to continue using the construct "intrinsic reward" as an independent construct, but to eliminate it from the "overall engagement" construct due to the not ideal reliability value and the fact that the construct only had two items. The concerns of the researchers with this construct were parallel to discussions by Lovelace (2013). A copy of the instrument is provided in Appendix 1.

In addition to the six constructs on the SEI, shown in Table 2.1., the 4-H agent responsible for the archival data added a seventh construct pertaining to the student's relationship with 4-H. The items for this construct can be found in Table 3.1. Cronbach's alpha was also calculated to measure the reliability of the 4-H relationship construct. This construct can assist the 4-H staff in a county in determining the level of engagement for 4-H activities or the receptiveness of the student towards 4-H programming.

Table 3.1. *Items Used in the Instrument for the Construct “Student’s 4-H Relationship”*

#	Item
6	I enjoy 4-H activities the most when my friends are also involved.
14	I enjoy participating in 4-H club meetings during school.
19	I participate in 4-H activities outside of school.
27	I believe that 4-H is an important organization for youth.
36	My 4-H Agent cares about me.

Population

The target population for this study was a census of students enrolled in 7th grade at Elbert County Middle School. According to the Georgia Department of Education (2015d), at the time there were 202 students enrolled in ECMS 7th grade. The sampling frame was a census of all students present in school on the day the instrument was given to students to complete. The students who were absent from school or out of class (in other activities or in suspension) at the time the instrument was distributed did not have the opportunity to participate. Every student received the instrument and was asked to complete it; however, it was voluntary and it is possible some students did not participate. One-hundred-eighty-five completed instruments were returned to the researcher. Thus, the response rate was higher than 92% (while the researcher knows the number of 7th grade students in the school, the exact number of students in the sampling frame is unknown because, for confidentiality reasons, the researcher did not

collect data on the students who were absent from class). Given that the response rate was higher than 92%, no further efforts were done to collect missing instruments or compare respondents with non-respondents to assess statistically the extent of nonresponse error.

Data Collection Procedures

The instrument was given to students by the Elbert County 4-H Agent during 4-H Club Meeting time at the Elbert County Middle School in the classroom setting. The 4-H Agent was assisted in the collection process by the 7th grade Science Instructors. Each line item was read by the teacher to ensure comprehension by those students who chose to participate, as some are listed in Special Education with low reading capabilities. According to Fredricks et al. (2011), it is important to read questions out loud especially at the elementary and middle school levels to ensure the chance that students misread the questions is reduced. The instrument was given as a hardcopy, one to each student.

Data Analysis Procedures

Previous research with the SEI stated that the coefficient alpha was calculated to be between .72 and .92, which is strong enough to prove internal consistency (a measure of reliability) (Fredricks et al., 2011). The SEI has previously been analyzed for reliability and validity. Reliability, as measured with Cronbach's alpha, means that the items in each construct are consistent with each other and measure the same thing (internal consistency). Validity is the

extent to which the instrument measures what is supposed to be measuring. There are two main types of validity; construct validity which measures the appropriateness of the items in that construct, and criterion-related validity where scores should relate to outcomes (behaviors). Validity of the constructs and the instrument was first established by Appleton et al. (2006) and Lovelace et al. (2014), and determined through face-validity by the researchers (the extent to which it is subjectively viewed – by the researchers – as covering what it purports to measure).

Responses were coded and entered into an excel spreadsheet. The items for the intrinsic reward construct were reverse coded before being entered. Using the four-point Likert scale, the response were coded strongly disagree (1), disagree (2), agree (3) and strongly agree (4). For the purpose of this research, the archival data were void of any individually identifiable information. From excel, data were transferred into the SPSS software for further analysis. Frequencies of responses were calculated for each item and for demographic data. Reliability of each construct and overall student engagement were measured using Cronbach's alpha. Means, Standard Deviations, and Standard Error of the Mean were calculated for each construct. Paired t-tests were conducted to compare constructs to each other. ANOVA tests and independent samples t-tests were used to compare levels of engagement between the different demographic groups.

Summary

The researcher was able to use archival data collected to examine engagement levels of 7th grade students in Elbert County. Original data were assembled from a self-report instrument given to students during 4-H class time at Elbert County Middle School. Data were analyzed using SPSS. Through this study, a program can be planned and implemented to help engage students and encourage high school graduation. The potential for using the SEI to manage student engagement and intervene when disengagement is high, considering the previous work done with the instrument and the research done to assist in high school graduation.

CHAPTER FOUR

RESULTS & DISCUSSION

Introduction

Results from the Student Engagement Instrument data analysis are outlined in this chapter. There were responses from one-hundred-eighty-five 7th grade students from Elbert County Middle School. Examining the existing data has assisted the researcher in answering the following research questions:

- Research Question #1: What are the demographics of the population studied in this research?
- Research Question #2: What is the value of each of the constructs of student engagement and overall student engagement among the respondents? How do the constructs compare with each other?
- Research question #3: Is there a significant difference in the overall measure of student engagement between the different “demographic” groups (racial/ethnic, living arrangements, and sex)?
- Research Question #4: Is there a significant difference between Latino, non-Latino White, and non-Latino Black/Biracial students in any particular construct measurement of student engagement?

- Research Question 5: What is the value of each of the constructs of student engagement and overall student engagement among the Latino respondents? How do the constructs compare with each other in the case of Latino respondents?

Research Questions

Research Question #1: What are the demographics of the population studied in this research?

To answer the first research question, the researcher entered self-reported demographics from the students into SPSS computer software. Results from each demographic question are listed below. Table 4.1 summarizes the race demographics of students. All students self-identified as being White, African American, or both White and African American.

Table 4.1

Respondent Demographics - Race (Self-Report)

		Valid	
	Self-reported Race	Frequency	Percent
Valid	White	123	67.2
	African American (Black)	58	31.7
	White & African American (Biracial)	2	1.1
	Asian/Middle Eastern	0	0
	Other	0	0
	Total answered	183	100
Missing	System	2	
Total		185	

Students were also asked whether or not they considered themselves of Latino ethnicity. Table 4.2 shows the results from this question.

Table 4.2

Respondent Demographics - Latino Ethnicity (Self-Report)

	Self-Reported Ethnicity	Frequency	Percent
Valid	Reports to be Latino	23	12.4
	Does not report to be Latino	162	87.6
Total		185	

Table 4.3 shows the cross-tabulation of the results from the race and the ethnicity question.

Table 4.3

Respondent Demographics – Race and Ethnicity Crosstabulation (Self-Report)

		Report Latino Ethnicity?		Total
		Latino	No	
Race	White	20	103	123
	African American	2	56	58
	White and African American	0	2	2
	No answer	1	1	2
Total		23	162	185

For analysis and study throughout the rest of the document, the researcher grouped students who indicated to be African American and students who indicated to be both African American and White in a group labeled

Black/Biracial. Thus, the group labeled Black/Biracial includes sixty students, which corresponds to the fifty-eight respondents that indicated to be African American, plus the two respondents who indicated to be both White and African American. Two of these students, also reported to be Latino.

From the cross-tabulated results (Table 4.2), the researcher generated the following Racial/Ethnic groups: Latino, Non-Latino White, and non-Latino Black/Biracial, shown in Table 4.4 These groups are the ones used in subsequent analysis in this study. If the respondents indicated they were Latino, then they were assigned to the “Latino” group, regardless of self-reported race. Twenty-three respondents reported to be Latino. Of these, twenty reported to be White, two reported to be Black, and one did not report race. The researcher grouped the non-Latino respondents in two groups, the non-Latino White, and then non-Latino Black/Biracial students. One student did not report race nor being of Latino ethnicity.

Table 4.4

Respondent Demographics - Racial/Ethnic (Researcher-Generated Groups from Self-Report Data)

	Researcher-Generated	Frequency	Valid Percent
Valid	Latino	23	12.5
	Whites	103	56
	Non-Latino Black/Biracial	58	31.5
	Total	184	100
Missing	System	1	
Total		185	

Students were also asked to select their living arrangements based on three choices: student lives with their parents, student lives with their grandparents or student lives with “other.” Other could be another relative, foster home, family friend, etc. Results are in Table 4.5.

Table 4.5

Respondent Demographics - Living Arrangements (Self-Report)

		Frequency	Valid Percent
Valid	Student Lives with Parents	163	89.1
	Student Lives with Grandparents	11	6
	Other	9	4.9
	Total	183	100
Missing	System	2	
Total		185	

Table 4.6 shows the results from the last demographic question, whether students were of male or female.

Table 4.6

Respondent Demographics – Sex (Self-Report)

		Frequency	Valid Percent
Valid	Male	88	48.4
	Female	94	51.6
	Total	182	100
Missing	System	3	
Total		185	

Research Question #2: What is the value of each of the constructs of student engagement and overall student engagement among the respondents? How do the constructs compare with each other?

Reliability of Constructs

Before calculating values for each of the constructs, the researcher checked to make sure the constructs were reliable with this group of respondents. When the instrument was originally used, it was tested with students from a different type of environment than Elbert County, Georgia. Furthermore, a construct (4-H Relationship) was added to the original questionnaire. Confirming the reliability of each construct was important.

Constructs were measured using SPSS to determine the Cronbach's alpha for reliability. A number closer to one means the reliability is stronger. Cronbach's alpha should be at least 0.7 in order to consider the construct reliable. Results are listed in Table 4.7. Six out of seven constructs had a Cronbach's alpha above 0.7, indicating the constructs were reliable. The only construct that had a Cronbach's alpha lower than 0.7 was the intrinsic reward construct. Because of a low Cronbach's Alpha, and because it had only two items, the researchers decided to keep the construct for individual analysis, but not include it in the construct "overall engagement." This decision was consistent with analysis by Lovelace (2013).

Table 4.7

Research Constructs with Corresponding Items from Research Instrument and Cronbach's Alpha for Reliability Analysis

		(N=185) Constructs, # of items,
Item	Item as presented in questionnaire	Cronbach's Alpha
1	My family/guardian(s) are there for me when I need them	Family Support for Learning 4 items C. Alpha: 0.785
	When something good happens at school, my	
12	family/guardian(s) want to know about it	
20	When I have problems at school my family/guardian(s) are	
	willing to help me	Engagement 33 items C. Alpha: 0.934
	My family/guardian(s) want me to keep trying when things	
29	are tough at school	
	After finishing my schoolwork I check it over to see if it's	
2	correct	Control and Relevance of School Work 9 items C. Alpha: 0.811
9	Most of what is important to know you learn in school.	
	When I do schoolwork I check to see whether I	
15	understand what I'm doing	
25	When I do well in school it's because I work hard	Teacher-
	The tests in my classes do a good job of measuring what	
26	I'm able to do	
	I feel like I have a say about what happens to me at	
28	school	
33	Learning is fun because I get better at something	
	What I'm learning in my classes will be important in my	
34	future	
	The grades in my classes do a good job of measuring	
35	what I'm able to do	
3	My teachers are there for me when I need them	

5 Adults at my school listen to the students	Student
10 The school rules are fair	Relationship
Most teachers at my school are interested in me as a	9 items
13 person, not just as a student	C. Alpha: 0.884
16 Overall, my teachers are open and honest with me	
21 Overall, adults at my school treat students fairly	
22 I enjoy talking to the teachers here	
31 At my school, teachers care about students	
39 I feel safe at school	
4 Other students here like me the way I am	
7 Students at my school are there for me when I need them	Peer Support
23 I enjoy talking to the students here	for Learning
24 I have some friends at school	6 items
37 Students here respect what I have to say	C. Alpha: 0.766
40 Other students at school care about me	
8 My education will create many future opportunities for me	Future Goals
11 Going to school after high school is important	and Aspirations
17 I plan to continue my education following high school	5 items
30 I am hopeful about my future	C. Alpha: 0.849
38 School is important for achieving my future goals	
I enjoy 4-H activities the most when my friends are also	
6 involved	4-H
14 I enjoy participating in 4-H club meetings during school	Relationships
19 I participate in 4-H activities outside of school	5 items
27 I believe that 4-H is an important organization for youth	C. Alpha: 0.798
36 My 4-H Agent cares about me	
18 I'll learn, but only if the teacher gives me a reward	Intrinsic Reward
I'll learn, but only if my family/guardian(s) give me a	2 items
32 reward	

In order to answer research question 2, data were entered into SPSS software. To compare constructs directly, each construct was standardized. The values of each construct were divided by the number of items or questions used to measure the particular construct. In SPSS, tests were run to compare each construct measure on the Student Engagement Instrument, as well as overall student engagement. The mean, standard deviation and standard error of the mean of each construct are shown in Table 4.8.

Table 4.8

Means, Standard Deviations, and Standard Error of the Mean of Research Constructs Future Goals, Family Support, Intrinsic Reward, Peer Support, School Control, 4-H Relationship, Teacher Relationship, and Overall Engagement

	Mean	N	Std. Deviation	Std. Error Mean
Future goals	3.6449	156	0.52967	0.04241
Family support	3.6362	156	0.54206	0.0434
Intrinsic reward	3.2724	156	0.83346	0.06673
Peer support	3.2457	156	0.58886	0.04715
School control	3.1752	156	0.55016	0.04405
4-H relationship	3.0359	156	0.6993	0.05599
Teacher relationship	2.9081	156	0.70772	0.05666

Overall engagement	3.2422	156	0.48394	0.03875
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Note: Missing cases excluded listwise.

The future goals and aspirations had the highest mean and the lowest standard deviation, meaning students scored this set of questions more favorably and answers for the population were within a closer range. Family support for learning was the second highest scoring construct. Teacher-student relationship and 4-H relationship were the two constructs with the lowest means. On a four-point Likert scale, the overall mean for all the constructs except the teacher-student relationship scored between “agree” (3) and “strongly agree” (4). In the case of teacher-student relationships, it scored slightly below “agree” (2.9). This was the lowest of all the measured constructs. Overall student engagement mean was also calculated to be relatively high (between agree and strongly agree, 3.2), but with room for improvement.

Using paired-samples t-tests means were compared to determine if there were significant differences between any two constructs. This test shows the researcher which constructs are more closely related in terms of the self-reported student score. Constructs scoring similar means should not be significantly different when compared to each other (sig, $p > 0.05$). However, those constructs with a greater difference in mean should show a significant difference (sig, $p < 0.05$).

Table 4.9

Paired Samples T-Test to Compare Means of the Research Constructs Future Goals, Family Support, Intrinsic Reward, Peer Support, School Control, 4-H Relationship, and Teacher Relationship: Paired Differences Mean, Standard Deviation, and 95% Confidence Interval of the Difference; and Mean Comparison's t, Degrees of Freedom, and Significance (2-tailed)

	Paired Differences					t	df	Sig. (2-tailed)
	Mean	Std. Dev.	95% Con. Int. Dif.					
			Lower	Upper				
Future-Family	0.00865	0.44167	-0.0612	0.07851	0.245	155	0.807	
Future-Intrinsic	0.37244	0.91993	0.22694	0.51793	5.057	155	0	
Future-Peer	0.39915	0.58221	0.30706	0.49123	8.563	155	0	
Future-School	0.46966	0.43212	0.40132	0.538	13.575	155	0	
Future-4-H	0.60897	0.75463	0.48962	0.72832	10.079	155	0	
Future-Teacher	0.73675	0.66672	0.63131	0.8422	13.802	155	0	
Family-Intrinsic	0.36378	0.95222	0.21318	0.51438	4.772	155	0	
Family-Peer	0.39049	0.55976	0.30196	0.47902	8.713	155	0	

Family-							
School	0.461	0.50668	0.38087	0.54114	11.364	155	0
Family-4-H	0.60032	0.71467	0.48729	0.71335	10.492	155	0
Family-							
Teacher	0.7281	0.66097	0.62356	0.83264	13.759	155	0
Intrinsic-			-				
Peer	0.02671	1.0477	0.13899	0.19241	0.318	155	0.751
Intrinsic-			-				
School	0.09722	0.98567	0.05867	0.25311	1.232	155	0.22
Intrinsic-4-							
H	0.23654	1.06535	0.06804	0.40503	2.773	155	0.006
Intrinsic-							
Teacher	0.36432	1.02739	0.20183	0.52681	4.429	155	0
Peer-			-				
School	0.07051	0.59177	0.02308	0.16411	1.488	155	0.139
Peer-4-H	0.20983	0.71316	0.09704	0.32262	3.675	155	0
Peer-							
Teacher	0.33761	0.6531	0.23431	0.4409	6.456	155	0
School-4-H	0.13932	0.72125	0.02524	0.25339	2.413	155	0.017
School-							
Teacher	0.26709	0.50229	0.18765	0.34653	6.642	155	0
4-H-							
Teacher	0.12778	0.74277	0.0103	0.24525	2.149	155	0.033

There was no significant difference found between future goals and aspirations and family support for learning. Likewise, no significant differences were found between the following paired constructs: intrinsic reward to peer support for learning, intrinsic reward to control and relevance of school work, and peer support for learning to control and relevance of school work. The paired-samples t-test show a significant difference in the rest of the comparisons. Table 4.10 summarizes these separations of means.

Table 4.10

Means and Separation of Means of Research Constructs Future Goals, Family Support, Intrinsic Reward, Peer Support, School Control, 4-H Relationship, and Teacher Relationship

Construct	Mean	Separation of means ^a
Future goals ^b	3.6449	a
Family support ^b	3.6362	a
Intrinsic reward	3.2724	b
Peer support ^b	3.2457	b
School control ^b	3.1752	b
4-H relationship	3.0359	c
Teacher relationship ^b	2.9081	d

N=156. Missing cases were excluded.

^a Means that do not share same letter in this column differ significantly at $p < 0.05$

^b Overall student engagement is a construct formed by constructs Future goals, Family support, Peer support, School control, and Teacher relationship.

Research question #3: Is there a significant difference in the overall measure of student engagement between the different “demographic” groups (racial/ethnic, living arrangements, and sex)?

To answer research question #3, the researchers conducted an analysis of variance test (ANOVA) for each of the demographic characteristic with more than two groups (racial/ethnic, and living arrangements), and an independent samples t-test for the demographic characteristics with only two groups (sex). Table 4.11 and Table 4.12 show the results for student engagement among the racial/ethnic groups. The ANOVA yielded a $p > 0.05$, meaning that there were no significant differences found among Latinos, non-Latino White and non-Latino Black/Biracial regarding overall student engagement.

Table 4.11

Results of Overall Measure of Student Engagement by Racial/Ethnic (Researcher-Generated) Groups: Means, Standard Deviations, Standard Error, and 95% Confidence Interval for the Mean

Racial/Ethnic Groups	N	Mean	Std. Dev.	95% Conf. Int. Mean	
				Lower Bound	Upper Bound
Latinos	21	3.3131	0.5041	3.0837	3.5426
Non-Latino White	93	3.2509	0.45558	3.1571	3.3447

Non-Latino					
Black/Biracial	50	3.2024	0.50819	3.058	3.3469
Total	164	3.2441	0.47659	3.1706	3.3176

Table 4.12

ANOVA for Comparison of Means of Overall Measure of Student Engagement between Racial/Ethnic (Researcher-Generated) Groups: Sum of Squares, Degrees of Freedom, Mean Square, F, and Significance

	Sum of Squares	df	Mean Square	F	Sig.
Between Racial/Ethnic					
Groups	0.191	2	0.096	0.418	0.659
Within Racial/Ethnic					
Groups	36.832	161	0.229		
Total	37.023	163			

The same tests were run to see if there was a significant difference among students who lived with their parents, grandparents or “other.” Again, no significant difference was found between these three demographic groups regarding overall student engagement. Results can be found in Table 4.13 and Table 4.14.

Table 4.13

Results of Overall Measure of Student Engagement by Living Arrangement Groups: Means, Standard Deviations, Standard Error, and 95% Confidence Interval for the Mean

Living Arrangements	N	Mean	Std. Dev.	95% Conf. Int. Mean	
				Lower Bound	Upper Bound
Lives with Parents	146	3.2505	0.47199	3.1733	3.3277
Lives with Grandparents	10	3.103	0.42717	2.7975	3.4086
"Other" Living Arrangements	7	3.2035	0.63485	2.6163	3.7906
Total	163	3.2394	0.47516	3.166	3.3129

Table 4.14

ANOVA for Comparison of Means of Overall Measure of Student Engagement between Living Arrangement Groups: Sum of Squares, Degrees of Freedom, Mean Square, F, and Significance

	Sum of Squares	df	Mean Square	F	Sig.
Between Living Arrangement Groups	0.213	2	0.107	0.469	0.627
Within Living Arrangement Groups	36.362	160	0.227		
Total	36.575	162			

In the case of the comparison of student engagement scores between males and females, no significant differences were found. Results can be found in Table 4.15 and Table 4.16.

Table 4.15

Results of Overall Measure of Student Engagement by Sex Groups: Means, Standard Deviations, Standard Error, and 95% Confidence Interval for the Mean

Sex	N	Mean	Std. Deviation	Std. Error Mean
Male	76	3.2416	0.49692	0.057
Female	86	3.2438	0.45801	0.04939

Table 4.16

Independent Samples T-Test for Comparison of Means of Overall Measure of Student Engagement between Males and Females: Sum of Squares, Degrees of Freedom, Mean Square, F, and Significance

Levene's Test for Equality of Variances: F = 0.678; Sig. = 0.411							
t-test for Equality of Means							
	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Dif.	95% Confidence Interval of the Difference	
						Lower	Upper
Equal var. assumed	-0.029	160	0.977	-0.00221	0.07504	-0.1504	0.14599
Equal var. not assumed	-0.029	153.531	0.977	-0.00221	0.07542	-0.1512	0.14679

Research Question #4: Is there a significant difference between Latino, non-Latino White, and non-Latino Black/Biracial students in any particular construct measurement of student engagement?

In order to answer this research question, the researchers conducted an ANOVA test for each of the constructs (comparing the different ethnic/racial groups. Three distinct demographic groups were analyzed; Latino students, non-Latino White and non-Latino Black/Biracial students. In Table 4.17 shows the mean, standard deviation, and 95% confidence interval of the Mean of each construct, for each ethnic/racial group.

Table 4.17

Results of Each of the Constructs (Future Goals, Family Support, Intrinsic Reward, Peer Support, School Control, 4-H Relationships, and Teacher Relationships), by ethnic/racial groups: Means, Standard Deviations, and 95% Confidence Interval for the Mean

		N	Mean	Std. Dev	95% Conf I Mean	
					Lower B	Upper B
Future Goals & Aspirations	Latino	21	3.5714	0.60427	3.2964	3.8465
	Non-Latino White	89	3.6921	0.45031	3.5973	3.787
	Non-Latino Black/Biracial	46	3.587	0.63021	3.3998	3.7741
	Total	156	3.6449	0.52967	3.5611	3.7286
Family Support for Learning	Latino	21	3.5476	0.53979	3.3019	3.7933
	Non-Latino White	89	3.7022	0.48247	3.6006	3.8039
	Non-Latino Black/Biracial	46	3.5489	0.63818	3.3594	3.7384
	Total	156	3.6362	0.54206	3.5505	3.7219
Intrinsic Reward	Latino	21	3.3333	0.79582	2.9711	3.6956
	Non-Latino White	89	3.382	0.73864	3.2264	3.5376
	Non-Latino	46	3.0326	0.97981	2.7416	3.3236

	Black/Biracial					
	Total	156	3.2724	0.83346	3.1406	3.4043
	Latino	21	3.3413	0.43294	3.1442	3.5383
Peer Support for Learning	Non-Latino White	89	3.2884	0.57613	3.167	3.4098
	Non-Latino					
	Black/Biracial	46	3.1196	0.66171	2.9231	3.3161
	Total	156	3.2457	0.58886	3.1526	3.3389
	Latino	21	3.2063	0.63856	2.9157	3.497
School Control	Non-Latino White	89	3.1411	0.52831	3.0298	3.2524
	Non-Latino					
	Black/Biracial	46	3.2271	0.55677	3.0617	3.3924
	Total	156	3.1752	0.55016	3.0882	3.2622
	Latino	21	3.0952	0.54633	2.8466	3.3439
4-H Relationship	Non-Latino White	89	3.0989	0.72119	2.947	3.2508
	Non-Latino					
	Black/Biracial	46	2.887	0.70887	2.6764	3.0975
	Total	156	3.0359	0.6993	2.9253	3.1465
	Latino	21	3.1534	0.64643	2.8592	3.4477
Teacher Relationship	Non-Latino White	89	2.9014	0.70202	2.7535	3.0493
	Non-Latino					
	Black/Biracial	46	2.8092	0.73317	2.5915	3.0269
	Total	156	2.9081	0.70772	2.7962	3.0201

Latino students scored the highest means in the peer support for learning and teacher-student relationship constructs. However, these differences were not significant. Table 4.18 shows the results from the ANOVA test. No significant difference was found between the ethnic/racial groups in any of the measured constructs.

Table 4.18

ANOVA for Comparison of Means of Constructs Future Goals, Family Support, Intrinsic Reward, Peer Support, School Control, 4-H relationships, and Teacher Relationships between “Racial/Ethnic” Groups: Sum of Squares, Degrees of Freedom, Mean Square, F, and Significance

		Sum of Squares	df	Mean Square	F	Sig.
Future Goals	Between Racial/Ethnic Groups	0.466	2	0.233	0.829	0.438
	Within Racial/Ethnic Groups	43.02	153	0.281		
	Total	43.486	155			
Family Support	Between Racial/Ethnic Groups	0.903	2	0.452	1.548	0.216
	Within Racial/Ethnic Groups	44.639	153	0.292		
	Total	45.543	155			
Intrinsic Reward	Between Racial/Ethnic Groups	3.792	2	1.896	2.793	0.064
	Within Racial/Ethnic Groups	103.879	153	0.679		
	Total	107.671	155			
Peer Support	Between Racial/Ethnic Groups	1.086	2	0.543	1.577	0.21
	Within Racial/Ethnic Groups	52.661	153	0.344		
	Total	53.747	155			
School Control	Between Racial/Ethnic Groups	0.248	2	0.124	0.406	0.667
	Within Racial/Ethnic Groups	46.667	153	0.305		
	Total	46.915	155			
4-H Relationship	Between Racial/Ethnic Groups	1.447	2	0.724	1.489	0.229
	Within Racial/Ethnic Groups	74.352	153	0.486		
	Total	75.799	155			
Teacher Relationship	Between Racial/Ethnic Groups	1.718	2	0.859	1.731	0.18

Within Racial/Ethnic			
Groups	75.915	153	0.496
Total	77.634	155	

Research Question 5: What is the value of each of the constructs of student engagement and overall student engagement among the Latino respondents? How do the constructs compare with each other in the case of Latino respondents?

In order to answer this research question, the researchers analyzed the data using only data from respondents who self-reported Latino ethnicity. Table 4.19 shows the mean, standard deviation and standard error mean in each construct for only the Latino demographic. All constructs tested to have a mean relatively similar (not significantly different), ranging from 3.095 to 3.571. The lowest scoring construct was 4-H Relationship. The highest scoring construct was Future Goals and Aspirations. The second lowest scoring construct was the Teacher-Student Relationship, with a mean of 3.153.

Table 4.19

Means, Standard Deviations, and Standard Error of the Mean of Research

Constructs Future Goals, Family Support, Intrinsic Reward, Peer Support, School Control, 4-H Relationship, Teacher Relationship, and Overall Engagement, for Latino Students

Constructs (Latino Students)	Mean	N	Std. Deviation	Std. Error Mean
Future goals	3.5714	21	0.60427	0.13186
Family support	3.5476	21	0.53979	0.11779
Intrinsic reward	3.3333	21	0.79582	0.17366
Peer support	3.3413	21	0.43294	0.09447
School control	3.2063	21	0.63856	0.13935
4-H relationship	3.0952	21	0.54633	0.11922
Teacher relationship	3.1534	21	0.64643	0.14106
Overall Engagement	3.3131	21	0.5041	0.11

Note: Missing cases excluded.

To determine which constructs were significantly different from each other, a paired-samples t-test was conducted for all pairs of constructs, for data from Latino students. Results are found in Table 4.20.

Table 4.20

Paired Samples T-Test to Compare Means of the Research Constructs Future Goals, Family Support, Intrinsic Reward, Peer Support, School Control, 4-H Relationship, and Teacher Relationship, for Latino Students: Paired Differences Mean, Standard Deviation, and 95% Confidence Interval of the Difference; and Mean Comparison's t, Degrees of Freedom, and Significance (2-tailed)

Comparison of Means Latino Students	Mean	Std. Dev.	Paired Differences		t	df	Sig. (2-tailed)
			95% Con. Int. Dif. Lower	Upper			
Future-Family	0.02381	0.57328	-0.23715	0.28477	0.19	20	0.851
Future-Intrinsic	0.2381	0.79905	-0.12563	0.60182	1.365	20	0.187
Future-Peer	0.23016	0.52163	-0.00729	0.4676	2.022	20	0.057
Future-School	0.36508	0.42226	0.17287	0.55729	3.962	20	0.001
Future-4-H	0.47619	0.88877	0.07163	0.88075	2.455	20	0.023
Future-Teacher	0.41799	0.58919	0.14979	0.68618	3.251	20	0.004
Family-Intrinsic	0.21429	0.93303	-0.21042	0.63899	1.052	20	0.305
Family-Peer	0.20635	0.47039	-0.00777	0.42047	2.01	20	0.058
Family-School	0.34127	0.50032	0.11353	0.56901	3.126	20	0.005
Family-4-H	0.45238	0.77095	0.10145	0.80331	2.689	20	0.014
Family-Teacher	0.39418	0.44985	0.18941	0.59895	4.015	20	0.001
-							
Intrinsic-Peer	0.00794	0.89981	-0.41752	0.40165	-0.04	20	0.968
Intrinsic-School	0.12698	0.97865	-0.31849	0.57246	0.595	20	0.559
Intrinsic-4-H	0.2381	1.15693	-0.28853	0.76472	0.943	20	0.357
Intrinsic-Teacher	0.17989	0.96767	-0.26059	0.62037	0.852	20	0.404
Peer-School	0.13492	0.48355	-0.08519	0.35503	1.279	20	0.216

Peer-4-H	0.24603	0.66646	-0.05734	0.5494	1.692	20	0.106
Peer-Teacher	0.18783	0.52396	-0.05067	0.42633	1.643	20	0.116
School-4-H	0.11111	0.82513	-0.26448	0.48671	0.617	20	0.544
School-Teacher	0.05291	0.45626	-0.15478	0.2606	0.531	20	0.601
					-		
4-H-Teacher	-0.0582	0.74411	-0.39692	0.28051	0.358	20	0.724

When comparing constructs, the only pairs that showed a significant difference were: future goals and aspirations to control and relevance to school work, future goals and aspirations to 4-H relationship, future goals and aspirations to teacher-student relationship, family support for learning to control and relevance to school work, family support for learning to 4-H relationship and family support for learning to teacher-student relationship. There were less significant differences when comparing constructs just among the Latino versus the whole 7th grade. The separation of means summary for Latino students is shown in Table 4.21.

Table 4.21

Means and Separation of Means of Research Constructs Future Goals, Family Support, Intrinsic Reward, Peer Support, School Control, 4-H Relationship, and Teacher Relationship

Construct	Mean	Separation of means ^a	
Future goals ^b	3.5714	a	
Family support ^b	3.5476	a	
Intrinsic reward	3.3333	a	b
Peer support ^b	3.3413	a	b
School control ^b	3.2063		b
4-H relationship	3.0952		b
Teacher relationship ^b	3.1534		b

N=156. Missing cases were excluded listwise

^a Means that do not share same letter in this column differ significantly at $p < 0.05$

^b Overall student engagement is a construct formed by constructs Future goals, Family support, Peer support, School control, and Teacher relationship.

Discussion of Findings

Research Question #1: What are the demographics of the population studied in this research?

The population for the 7th grade enrolled in Elbert County Middle School self-reported the following: 12.5% Latino, 31.5% non-Latino black or biracial, and 56% white. According to the U.S. Census Bureau (2015), those same demographic groups for the entire county are at 5% Latino, 30% Black/Biracial and 68% White. Comparing the percentages reported from both groups can conclude that the Latino population is growing much faster (5% percent general population but 12.5% 7th grade population) than the White population while the Black population is remaining constant. Even though the Latino population is very small in comparison to the other two groups, it is the one with highest rate of growth.

Reaching out to the Latino demographic is not only important for 4-H programming, but also for social gain. Latino students in Georgia are graduating from high school at a significantly lower rate than African American students ("The Changing Face," 2006). If the United States could reduce the number of students who dropout out of high school by at least half, the economic gain would be tremendous, in the billions of dollars (Alliance for Excellent Education, 2011). Not only are Latino students the most likely demographic to drop out of high school, they are also less likely to further their education. Additionally Latino students are the only demographic group to enroll into junior colleges at a greater rate than they do four-year institutions (Gonzalez, 2012), meaning work needs to

be done to recruit this demographic into four-year collegiate programs.

Encouragingly, Gonzalez (2012) also showed that Latinos born in the United States do attend college at a higher rate than first-generation immigrants.

Research Question #2: What is the value of each of the constructs of student engagement and overall student engagement among the respondents? How do the constructs compare with each other?

Once standardized, the means of the constructs for the 7th grade population could be compared. The order and corresponding mean are as follows: future goals and aspirations (3.645), family support for learning (3.640), intrinsic reward (3.272), peer support for learning (3.246), control for school work and relevance (3.175), 4-H relationship (3.036) and teacher student relationship (2.908). The mean for overall engagement was 3.242, meaning students are engaged at the middle school level but there is room for improvement. With the highest mean of 3.645 and the lowest mean of 2.908, significant differences were found when the constructs were compared to each other, meaning that for some constructs there is lower level of engagement, or from a programmatic perspective, more opportunities to explore for possible programmatic interventions.

Research question #3: Is there a significant difference in the overall measure of student engagement between the different “demographic” groups (racial/ethnic, living arrangements, and sex)?

The findings were interesting because they were not what the researcher expected to find, especially in the comparison between ethnic/racial groups. Results indicate that, for the most part, there is no difference in overall student engagement between any of the three ethnic/racial groups. Over the years, literature has indicated that there is likely to be a difference in engagement among ethnic/racial groups based on significantly different graduation rates between the groups. However, in this study all students reported to be equally engaged, regardless of their racial/ethnic group. It was also interesting to find that even students being raised in non-traditional homes (by their grandparents or other adults) reported being equally engaged as students living with their parents.

A contributing factor to the lack of significant differences between groups of students in Elbert County, at least for the 7th graders, is that the majority of students come from similar socioeconomic backgrounds. Poverty is relatively high among all students, regardless of group, with 78.5% of the students receiving free and reduced lunch services (Georgia Department of Education, 2015a). A school with a lower percentage of poverty among its students may show a greater difference among the demographic groups.

Research Question #4: Is there a significant difference between Latino, non-Latino White, and non-Latino Black/Biracial students in any particular construct measurement of student engagement?

Not only was there no significant difference in overall student engagement, there was no significant difference for any of the measured constructs between Latino, non-Latino White and non-Latino Black/Biracial students in the 7th grade, which is not consistent with the general narrative about lower engagement among minority students. Most of the literature, however, addresses engagement analysis for high school students rather than 7th graders. The question then is whether the disengagement grows exponentially between 7th grade and high school, or the lack of significant differences in this research is more attributable to the socioeconomic characteristics of the population in Elbert County.

When looking at the whole population, the constructs where participants were most engaged to least engaged were: future goals and aspirations, family support for learning, intrinsic reward, peer support for learning, school control for relevance, 4-H relationship and teacher-student relationship. For Latino students, the constructs from most engaged to least engaged were: future goals and aspirations, family support for learning, peer support for learning, intrinsic reward, school control for relevance, teacher-student relationship and 4-H relationship. The order of constructs from greatest to lowest means for the whole population compared to the Latino student population can be found in Table 4.22.

Table 4.22

Rankings of Constructs Measured for Both the General 7th grade Population and the Latino Student Population.

Rank	Population	Latino
1	Future Goals & Aspirations	Future Goals & Aspirations
2	Family Support for Learning	Family Support for Learning
3	Intrinsic Reward	Peer Support for Learning
4	Peer Support for Learning	Intrinsic Reward
5	School Control for Relevance	School Control for Relevance
6	4-H Relationship	Teacher-Student Relationship
7	Teacher-Student Relationship	4-H Relationship

While the researchers found no significant differences between racial/ethnic groups, there were differences between constructs. The data shows that for all three ethnic/racial groups the two lowest scoring means were for the 4-H relationship construct and the teacher-student relationship construct. Both of these constructs indicate that students in Elbert County Middle Schools may not be comfortable with having a positive youth-adult relationship with someone outside of their family. In the literature, minorities are reported to have a lower teacher-student relationship (Decker et al., 2007), which is why it was important to determine if the same was true for Elbert County. Although student-teacher relationship was one of the lowest scoring constructs for the mean, when

compared to the other two ethnic/racial groups, Latino students did have the highest mean, which is promising for the future. The group with lowest score in these constructs was the non-Latino Black/Biracial. If minorities are less likely to have a positive relationship with non-related caring adults, programming can be designed to address the issue. In general, low student-teacher relationships are expected at the middle school level. Student engagement research following from the elementary years through to the middle school years shows that students shift from a stronger relationship with teachers to a stronger relationship with peers over this time period (Decker et al., 2007). This may be evident in how both the overall population and the Latino population reported a higher mean in peer support for learning than teacher-student relationship.

Even with promising results, there is still a lot of room for improvement among students and non-related (family) caring adults. Establishing positive youth-adult partnerships could help increase student engagement levels and assist with graduation rates. Programming can be designed to help address this issue. Establishing positive youth-adult partnerships, such as 4-H club programming, could help increase student engagement levels and assist in improving graduation rates. Furthermore, positive youth-adult relationships have shown the following benefits: improves educational outcomes, improves curriculum for students, improves assessment practices, improves classroom management, changes tone in conversations between the two groups, reduces

unprofessional activities, strengthens teacher-student relationships, improves teacher training, improves positive youth development, and strongly improves the possibility of at-risk youth graduating high school (Mitra, 2009). Positive youth-adult relationships are worthy of strengthening.

Research Question 5: What is the value of each of the constructs of student engagement and overall student engagement among the Latino respondents? How do the constructs compare with each other in the case of Latino respondents?

While the differences were not significant, the lack of differences points to reported differences reported in engagement among groups in other counties as having more a socioeconomic origin rather than a racial/ethnic origin. The highest mean scores for Latinos were in the teacher-student relationship construct, and the peer support for learning construct, just as with the other groups. While not significantly higher, the fact that the Latino group does not have a lower score for teacher-student relationships is important, and could be explained through cultural values such as *personalismo* and *respeto* (Barker, Cook, & Borrego, 2010). Also, the high values of peer support for learning could be explained because Latino students may have a strong cohort or and opportunities for bonding given that they are similar to each other in cultural beliefs and language. This data parallels the literature that suggests Latino students prefer to stay in their ethnic group. For instance, Portes & Zady (2002) indicate that these students often segregate themselves from a larger population

by surrounding themselves with other Spanish speakers. Latino students in Elbert County are as likely to have a close-knit relationship among each other as the other ethnic/racial groups, even with the caveat of being a much smaller group.

Latinos had the lowest mean in the future goals and aspirations construct, also consistent with the literature (Gonzalez, 2012; Miller & Garcia, 2004; Portes & Zady, 2002; Turcios-Cotto & Milan, 2012). Research has shown that low self-esteem and adaption to a new culture affects how a student develops, and thus their achievement, both in school and out of school (Portes & Zady, 2002). This could part of the explanation why Latino students do not have as high of future goals and aspirations construct mean compared to the non-Latino White and non-Latino Black/Biracial. Unfortunately, many Latino students, especially those whose families have recently migrated to the United States, believe that they cannot achieve academic success or attend college. According to Turcios-Cotto and Milan (2012), Latino students also have a greater responsibility to their families than other ethnic/racial groups. Their obligation to help their family may influence their beliefs about completing high school and attending college. For example, a boy may have to work to help the family pay bills or a girl may have to stay at home and babysit younger siblings instead of concentrating on academic work.

In the case of family support, it was the Latino group that scored the lowest, consistent with reported problems faced by students with parents who are new Latino immigrants (language, cultural, and background barriers, in addition

other barriers also faced by students with parents of lower socio-economic and educational attainment) (McCoach et al., 2010; Moreno & Gaytan, 2013; Perez et al., 2009; Pianta, Hamre, & Allen, 2012). Furthermore, parents who cannot help their children with homework are more likely to create lower engagement in the area of family support (Christenson, Reschly & Wylie, 2012). Extension programming could prove beneficial in helping increase the mean score of the future goals and aspirations construct and even the family support by providing tutoring or homework “clinic” opportunities .

Summary

The 7th grade population (those who were in attendance on collection date) at Elbert County Middle School completed the SEI. One-hundred-eighty-five instruments were returned. One-hundred-twenty-three students indicated they were White, 58 African American, 2 Biracial, and 2 students did not answer this question. In addition, 23 students identified as Latino (20 White, 2 Black, 1 no race response). The racial/ethnic groups were further broken down into three groups by the researcher: 23 who identified as Latino, 103 as non-Latino White and 58 as non-Latino Black/Biracial. One-hundred-sixty-three students indicated that they lived with their parents, 11 with their grandparents and 9 as having other living arrangements (two missing). Eighty-eight respondents were male, 94 (3 missing).

All constructs, except intrinsic reward, were found to be reliable using Cronbach's alpha (>0.07). After standardizing constructs to compare means, the

student-teacher relationship construct was the only one to score below an “agree” scale for the whole population. Future goals and aspirations was the highest scoring construct for the entire sample group. A significant difference was found when comparing constructs against each other using a t-test, whereas the highest scoring constructs (Future Goals, Family Support) scored significantly higher than the rest of the constructs, and the lowest scoring constructs (4-H Relationship and Teacher Relationship), scored significantly lower than the rest of the constructs.

No significant difference was found in overall student engagement between the different demographic groups. Statistically, there was no significant difference between non-Latino White students, non-Latino Black/Biracial students and Latino students for overall engagement. Likewise, no significant difference was found in overall student engagement between those who lived with their parents, grandparents or had other living arrangements, nor between males and females when using the overall student engagement construct.

No significant differences were found between any of the construct means when comparing non-Latino White, non-Latino Black/Biracial and Latino students. The lack of significant differences was important because it did not correspond with current narrative about Latino students having lower engagement levels than other ethnic/racial groups.

When constructs were compared against each other for only the Latino population, fewer pairs reported a significant difference than when all students were considered together. Thus, there was less variability in construct scores for

Latino students than for other students. Mean scores for the constructs of just Latino students were all between agree and disagree (in descending order): 3.57 in future goals and aspirations, 3.55 family support for learning, 3.34 peer support for learning, 3.33 intrinsic reward, 3.21 control for school work and relevance, 3.15 student-teacher relationship and 3.10 4-H relationship.

CHAPTER FIVE

CONCLUSIONS AND RECOMMENDATIONS

Introduction

The dropout crisis in the United States is an unfortunate phenomenon. While trends have improved recently, there are still thousands of high school dropouts each year (Alliance for Excellent Education, 2011). Low student engagement is an important factor of high school dropout. Cooperative Extension has assisted with student engagement from the Smith Lever Act of 1914 in the form of 4-H Positive Youth Development. 4-H has instilled a love of “learning for life” in many people throughout the years. Active 4-H’ers are much more likely to stay in school, make healthy choices and graduate from high school. Naturally, 4-H Positive Youth Development has a lot to offer to at-risk youth, especially those from traditionally underserved populations.

Purpose of the Study

The purpose of this study was to examine engagement among students in the 7th grade at Elbert County Middle School and explore implications for 4-H programming. The researcher sought to measure student level of engagement based on cognitive and psychological constructs, and compare results between different racial/ethnic groups of students. Prior research shows that Latinos drop

out of high school at a greater rate than any other student group. Additionally, this demographic does not pursue higher education at the same rate as White, Black, or Asian students (Ivers, Milsom & Newsome, 2012; Turcios-Cotto & Milan, 2012).

Review of Methods

The Student Engagement Instrument, developed by Appleton et al. (2006), was administered to all 7th grade students from Elbert County Middle School who were present during the 4-H Club Meeting time. Completing the questionnaire was optional and participants were to remain anonymous. The instrument had 5 demographic questions and forty statements. The statements used a Likert scale with four options, from strongly disagree (1) to strongly agree (2), and built into seven constructs.

Once the questionnaires were collected from students on a hard copy of the instrument, data were entered into an excel spreadsheet by hand. The excel data was copied into SPSS software for analysis. Frequencies of responses were calculated for each item and for demographic data. Reliability of each construct and overall student engagement were measured using Cronbach's alpha. Means, Standard Deviations, and Standard Error of the Mean were calculated for each construct. Paired t-tests were conducted to compare constructs to each other. ANOVA tests and independent samples t-tests were used to compare levels of engagement between the different demographic groups.

Conclusions & Recommendations

This study determined that there were no significant differences in student engagement between Latino, non-Latino White and non-Latino Black/Biracial students in the 7th grade level in Elbert County, Georgia, as previously thought. Nothing found in the data suggested that student engagement is to blame for low academic achievement when comparing groups, at least at the middle school level in Elbert County, Georgia. This finding was not expected. Upon completing the literature review on Latino student achievement, student engagement and the dropout crisis, the researcher anticipated finding a strong difference in engagement between the ethnic/racial groups. However, that was not the case, probably because all groups in the county have high poverty rates. All ethnic/racial groups are equally engaged.

The following recommendations are given for practitioners working with the students, especially those who serve in roles closely related to academic achievement or student engagement.

1. First and foremost, programming needs to increase positive youth-adult partnerships or relationships. This need was evident because the two lowest scoring engagement constructs for all ethnic/racial groups were teacher-student relationship and 4-H relationship. Establishing afterschool activities, a leadership program or a mentorship course could assist in increasing these values, and in turn, student engagement. Recruiting teachers to volunteer for 4-H or afterschool activities may also increase

teacher-student relationships because the student would have an opportunity to see the teacher in different situations.

2. Positive Youth Development can help increase the level of engagement of all students. While programs like 4-H have been successful recruiting some students and demographic groups, they have had more difficulties recruiting Latino students. Miller & Garcia (2004) noted that in order to recruit and retain Latino students at the collegiate level, programs should have certain qualities. Characteristics mentioned in the literature review (institutional leadership, targeted recruitment, engaged faculty, personal attention, peer support, comprehensive financial assistance, enriched research opportunities, bridging the gap to the next level and continuous evaluation) may be equally important to recruiting and retaining Latino youth in 4-H programming at an earlier age. Therefore, 4-H programming should have strong, positive leadership, be applicable to the intended audience, use enthusiastic, caring adults, treat all students as individuals and not part of a larger group, maintain an inclusive environment among peers, provide opportunities for enhanced learning, push students to a higher standard and, of course, evaluate programs.
3. In order to recruit Latino and other underserved students into 4-H programming, 4-H professionals may need to implement programs specifically for this audience. As Portes & Zady (2002) eluded, Latino youth prefer to stay with those who are of the same ethnic group. If a 4-H program is created specifically for Latino students, they may be more

likely to participate. Once a program purposely created for Latinos is underway, the 4-H professional will have an opportunity to build trust and relationships with the Latino youth. Then Latino youth will be more likely to participate in other, more traditional, 4-H programming.

4. 4-H programming should also be implemented to increase the mean score of the future goals and aspirations construct for students of lower socioeconomic status. This can be done in a variety of ways. Increasing a student's self-esteem is likely to also increase their outlook for themselves in the future. Financial literacy programs can help show students the economic value of planning for the future. College tours and interactions with institutions of higher education may also help get students interested in continuing their education past high school.
5. The other construct that could show improvement for some students was that of family support for learning. In the case of new Latino immigrants, for example, parents may lack understanding about the United States public school system, may not be able to help students with homework and fill out forms in English, which may impact the family support for learning, a component in engagement. 4-H can offer programming for both kids and their families. In the case of new Latino immigrants, it is also very important to build trust and relationships, which may require programmatic changes. Once trust is established between 4-H professionals and Latino families, the parents may be more likely to ask for help. If 4-H professionals were bilingual, it would be very easy to

establish a support program for Latino parents to navigate the public school system. A tutoring program could also take some of the burden off parents who are unable to help their children with homework.

Below are suggestions to further the research in the area of student engagement and/or achievement, and particularly Latino students and Elbert County:

1. Teachers in Elbert County could take the cognitive and psychological engagement measures from this study using the SEI and compare them with behavioral and academic engagement. Since teachers have the opportunity to observe students on a daily basis and compile their academic scores, it would be easy for them to compare SEI measurements with their observations of a student's academic and behavioral engagement. This comparison could yield valuable information regarding the relationship between different types of engagement and their impact on academic achievement. With the available data in Elbert county, SEI engagement scores could be compared with Academic and Behavioral engagement within groups, not at the individual level. This could only be done if a student's SEI was identifiable, which was not the case in this study. It is recommended that in future research, data collected include individual codes so that all types of engagement can be contrasted. In addition, more demographic data is necessary. For example, while no significant differences were found between racial/ethnic groups, it would be interesting to examine if there is any specific

demographic characteristics with which differences align. While difficult to collect with youth self-report measures, data on family income levels could yield useful information.

2. One issue to address in future research would be to compare the non-Latino White population of Elbert County to the non-Latino White population from other rural areas in the southeastern United States. More specifically, it would be interesting to compare the non-Latino White population of Elbert County to the same demographic group in a county with less generalized poverty levels. The reasoning behind this suggestion is the assumption that perhaps engagement is lower in Elbert county because of socioeconomic issues, and the non-Latino White population in Elbert county is a lower achieving, less engaged demographic than in other areas throughout the country where non-Latino White students have higher family income and less poverty.
3. Future research should include a longitudinal study with the same cohort group of students to determine if student engagement measurements change at the 8th, 9th, 10th, 11th and 12th grade levels, if differences between demographic groups change with time, and if engagement and graduation rates are related. For future studies, it would be interesting to start the study in elementary school. This would allow researchers the opportunity to see at what age students become disengaged from school.
4. If student engagement can be ruled out as a cause of low academic achievement (this could only be ruled out through the aforementioned

longitudinal study), what are the major factors contributing to low student achievement or high school graduation? What are the specific factors affecting students in Elbert county? In the case of Latino students, Turcios-Cotto and Milan (2013) mention the following possible factors: poverty, poor school attendance, high teacher-student ratios in school, lack of bilingual education, lack of resources, concentration of “white history” used in curriculum, difference in family viewpoints/culture, strong family ties, difficulty in adjusting to life away from immediate family, higher value on “life” learning (morals, respect, manners, etc.), fear of “acting white,” and individual reasons. Future researchers should work with Latino students to examine each one of these ideas to see if there are two or three main factors that can be addressed through programming.

5. Researchers could explore the factors affecting student engagement and school achievement through qualitative methods. Similarly, qualitative methods could help determine possible programs and strategies to support engagement of students and ensure greater opportunities for school achievement and graduation. While engagement was similar for all groups, are the strategies to support engagement different between groups? Particularly in Elbert county, given the interest in better reaching Latino students, a focus group with Latino students could help determine factors impacting engagement and school achievement, and provide valuable information for 4-H programs regarding strategies that could help recruit, retain, and better serve students in positive youth development.

Summary

In Mitra's article on positive youth development, she noted that the most successful adults working with youth were not the ones with the most education, the best jobs or the greatest possessions, but those who understood youth development, grasped the culture youth are facing, and most of all possessed a lot of compassion (2009). 4-H professionals meet that criterion. Additionally, Villenas and Deyhle (1999) found that the majority of the educational professionals in the United States view failure as an individual problem and not a problem with the way the schools are organized or the current viewpoints of society. For some students of lower socioeconomic status, and Latino students specifically, the assumption has been that they do not try hard enough, putting the responsibility on the students alone without giving them the tools they need for success, rather than working to change the system. With continuous negative school-related experiences, motivation for school work can become diminished. However, 4-H professionals can help build self-esteem, confidence and relationships with caring adults to ensure Latino students have a greater chance at success. By getting Latino students involved in a 4-H program, they will practice the four essential elements of 4-H; mastery, generosity, belonging and independence. According to Kress (2004), this means adults and Latino students working together will have the opportunity to serve others, engage in learning something of interest, master skills needed for the future, enjoy a safe, inclusive

environment and strengthen decision making skills. Adults working with 4-H have much to offer in the world of student engagement and positive youth development, for all youth and the growing Latino youth population.

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APPENDICES

Student Engagement Instrument

7th Grade Survey

Please select (circle or x box) the response that most resembles your opinion of each statement.

Surveys are anonymous. Be honest with your answer.

	Strongly Disagree	Disagree	Agree	Strong Agree
1 My family/guardian(s) are there for me when I need them.	SD	D	A	SA
2 After finishing my schoolwork I check it over to see if it's correct.	SD	D	A	SA
3 My teachers are there for me when I need them.	SD	D	A	SA
4 Other students here like me the way I am.	SD	D	A	SA
5 Adults at my school listen to the students.	SD	D	A	SA
6 I enjoy 4-H activities the most when my friends are also involved.	SD	D	A	SA
7 Students at my school are there for me when I need them.	SD	D	A	SA
8 My education will create many future opportunities for me.	SD	D	A	SA
9 Most of what is important to know you learn in school.	SD	D	A	SA
10 The school rules are fair.	SD	D	A	SA
11 Going to school after high school is important.	SD	D	A	SA
12 When something good happens at school, my family/guardian(s) want to know about it.	SD	D	A	SA
13 Most teachers at my school are interested in me as a person, not just as a student.	SD	D	A	SA
14 I enjoy participating in 4-H club meetings during school.	SD	D	A	SA
15 When I do schoolwork I check to see whether I understand what I'm doing.	SD	D	A	SA
16 Overall, my teachers are open and honest with me.	SD	D	A	SA
17 I plan to continue my education following high school.	SD	D	A	SA
18 I'll learn, but only if the teacher gives me a reward.	SD	D	A	SA
19 I participate in 4-H activities outside of school.	SD	D	A	SA
20 When I have problems at school my family/guardian(s) are willing to help me.	SD	D	A	SA
21 Overall, adults at my school treat students fairly.	SD	D	A	SA
22 I enjoy talking to the teachers here.	SD	D	A	SA
23 I enjoy talking to the students here.	SD	D	A	SA
24 I have some friends at school.	SD	D	A	SA
25 When I do well in school it's because I work hard.	SD	D	A	SA
26 The tests in my classes do a good job of measuring what I'm able to do.	SD	D	A	SA
27 I believe that 4-H is an important organization for youth.	SD	D	A	SA
28 I feel like I have a say about what happens to me at school.	SD	D	A	SA
29 My family/guardian(s) want me to keep trying when things are tough at school.	SD	D	A	SA
30 I am hopeful about my future.	SD	D	A	SA
31 At my school, teachers care about students.	SD	D	A	SA
32 I'll learn, but only if my family/guardian(s) give me a reward.	SD	D	A	SA
33 Learning is fun because I get better at something.	SD	D	A	SA
34 What I'm learning in my classes will be important in my future.	SD	D	A	SA
35 The grades in my classes do a good job of measuring what I'm able to do.	SD	D	A	SA
36 My 4-H Agent cares about me.	SD	D	A	SA
37 Students here respect what I have to say.	SD	D	A	SA
38 School is important for achieving my future goals.	SD	D	A	SA
39 I feel safe at school.	SD	D	A	SA
40 Other students at school care about me.	SD	D	A	SA

Please tell us a little about yourself...

Please select (circle or x box) the response that most resembles your opinion of each statement. Surveys are anonymous.

I am:	White	African American	Asian/Middle Eastern
I live with:	Parents	Grandparents	Other
I live:	In the city limits	In the county	On a farm
I am:	Male	Female	Hispanic means your family is of Spanish speaking heritage
I am Hispanic	Yes	No	