The Effects of Teacher and Student Satisfaction on Student Achievement

Sean McWherter

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The Effects of Teacher and Student Satisfaction on Student Achievement

by

Sean McWherter

A Dissertation Submitted to the
Gardner-Webb University School of Education
in Partial Fulfillment of the Requirements
for the Degree of Doctor of Education

Gardner-Webb University
2012
Approval Page

This dissertation was submitted by Sean McWherter under the direction of the persons listed below. It was submitted to the Gardner-Webb University School of Education and approved in partial fulfillment of the requirements for the degree of Doctor of Education at Gardner-Webb University.

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Abstract

The Effects of Teacher and Student Satisfaction on Student Achievement. McWherter, Sean, 2012: Dissertation, Gardner-Webb University, Teacher Satisfaction/Student Satisfaction/Student Leadership/Effects of/Teacher Attrition

This dissertation was designed to examine factors contributing to both teacher and student satisfaction and to determine if a relationship existed between the satisfaction levels and student achievement. The contributing factors identified in this study consisted of items that could be influenced or controlled in the school environment. Maslow’s (1943) hierarchy of needs was used to help identify factors that could contribute to teacher and student satisfaction.

The subjects for this quantitative study came from a rural high school in the southern part of the United States. The participants in this study were analyzed according to their level of curricular involvement in either honors or regular education classes. These groups were chosen because of the difference in success rates on end-of-course exams (EOCs) between students in honors classes and those in regular education classes. This study determined student achievement according to pass/fail rates on the EOC examinations. This study employed the use of electronic surveys to determine influencing factors of satisfaction and overall satisfaction levels for both teachers and students which insured anonymity for the participants. Forty one of the 54 teachers in the school agreed to participate in this survey and 263 of the 436 available students agreed to participate in this survey. The teachers responded to a 21-item survey and the students responded to an 18-item survey.

An analysis of the data did not reveal any relationship between the satisfaction levels of either teachers or students to student achievement. Although this study did not identify whether higher levels of satisfaction attributed to higher levels of achievement on end-of-course exams, many influencing factors to both teacher and student satisfaction were identified. The data from this study also suggest that building level satisfaction among both teachers and students is universal, regardless of the curriculum level in which one is involved. However, more research involving multiple schools is needed to support both a universal satisfaction level and a relationship between satisfaction and achievement.
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Chapter 1: Introduction

Introduction

Teacher and student satisfaction is one thing that may often be overlooked by school and district level administrators in its relevance to academic performance. Unfortunately, some may hold the belief that a teacher’s or student’s satisfaction is a personal matter and not something to cause concern. After all, teachers are to teach and students are to learn.

Research has shown that both teacher satisfaction (Caprara, Barbranelli, Steca, & Malone, 2006) and student satisfaction (Lim, Kim, Chen, & Ryder, 2008) have been positively correlated to student academic achievement. Although it is true that an individual’s satisfaction level may be completely independent of another’s, all identified factors influencing satisfaction levels for both teachers and students in this study correlate with safety and security, love and belonging, and esteem as outlined by Maslow’s hierarchy of needs (1943).

This research has reviewed the literature aligned with teacher satisfaction, student satisfaction, and student achievement. Following the literature review, a quantitative study was conducted to assist in determining how strong the relationships are between teacher/student satisfaction and student achievement. This study also analyzed current research in order to determine contributing factors to both teacher and student satisfaction that can be controlled in the school environment. The validity of statistically significant and insignificant relationships was deciphered using correlation coefficients, determining the R² values, and identifying the p-values.

The participants in this study were teachers and students from a high school in rural North Carolina. Teachers and students completed surveys aimed at measuring how
well schools are satisfying teacher and student needs as they relate to one’s perceived safety and security, feelings of love and belonging, or sense of esteem. The decision to utilize the hierarchy of needs for this process was based on Maslow’s (1943) premises that supporting and satisfying a person’s basic needs will allow him/her to attain higher levels of safety and security, love and belonging, esteem, and self-actualization, and with that greater personal achievement or “becoming everything that one is capable of becoming” (p. 8). The teachers and students in the gathered data were analyzed according to their level of curricular involvement, i.e. honors or regular education classes. Students taking honors classes were compared to students in regular education classes and teachers instructing honors classes were compared to teachers instructing regular education classes. The purpose of comparing teachers and students according to curriculum was to determine if there was a relationship between student satisfaction and academic achievement.

**Statement of Problem**

Low levels of satisfaction among teachers and/or students can negatively impact student achievement (Brown, Anfara, & Roney, 2004; Van Houtte, 2006; Liu & Liu, 2004; Pike & Simpson, 1997). Research shows that higher levels of worker satisfaction are correlated with higher levels of employee success and/or productivity, and lower levels of satisfaction are correlated with lower levels of productivity and/or success (Durbin, 1991; Edwards, Bell, Arthur, & Decuir, 2008; Netemeyer, Maxham, & Lichtenstein, 2010). In a study of 306 store managers and 1,615 store employees it was found that the effect of manager job satisfaction has a profound effect on employee job performance but not employee satisfaction (Netemeyer et al., 2010). However, employee satisfaction does correlate to employee performance (Netemeyer et al., 2010). Based on
these data, identifying teachers as the managers of their classrooms and students as the employees, it can be clearly stated that low levels of satisfaction among teachers and/or students can negatively impact student achievement (Brown et al., 2004; Van Houtte, 2006; Liu & Liu, 2004; Pike & Simpson, 1997).

There are many factors that can influence student achievement such as socioeconomic status, the quality of education, and teacher/student satisfaction (Brown et al., 2004). This study investigated whether a relationship existed between student achievement and teacher/student satisfaction. Student achievement is a problem for students and teachers who are unsatisfied with their school environment (Brown et al., 2004; Van Houtte, 2006; Liu & Liu, 2004; Pike & Simpson, 1997). Satisfaction is an important aspect of student success, and higher satisfaction levels have been reported to coincide with higher levels of academic achievement (Brown et al., 2004). Satisfaction can lead one to have a positive outlook on the objective they need to complete which will cause them to be more involved in their work (Hirschfeld, 2002). This involvement increases one’s opportunity for success. The problem is that those who are unsatisfied will have a less positive outlook on their job and will be less successful (Hirschfeld, 2002). This study investigated factors that contribute to higher and lower levels of teacher and student satisfaction and then correlated that satisfaction to student academic achievement.

The subject school in this study exemplified an achievement gap between its honors classes and its regular education classes. The 2011 passing rates for end-of-course exams (EOCs) in the honors classes were 94.07%, while the regular education classes reported a 48.36% passing rate on the EOCs. Total number of student enrollment in the honors classes was 225 students, or approximately 27.7% of the student body. The total
enrollment in the regular education classes was 211 students or approximately 26% of the student body. Data were used only for tested subjects that had both honors and regular education sections. It was the researcher’s concern that the satisfaction levels of the students and teachers were a contributing factor to the success rates of the students at this school, or that the success rates of the students could be a contributing factor to the satisfaction levels. To help establish causality, a multiple regression analysis was conducted between each domain researched in this study believed to influence satisfaction and overall satisfaction.

**Purpose of Study**

The purpose of this study was to determine if there was a relationship between student satisfaction and academic achievement. The study also investigated whether there was a relationship between teacher satisfaction and student achievement.

**Research Questions**

1. What is the relationship between the level of content taught and student achievement by their performance on EOC exams?
2. What is the relationship between the level of teacher satisfaction and student achievement by their performance on EOC exams?
3. What is the relationship between the level of student satisfaction and student achievement by their performance on EOC exams?

**Significance of Study**

School leaders struggling with student achievement may be able to find a yet unexplored direction to increase student achievement. Teachers struggling or desiring a more productive climate in their classroom may be able to get some helpful ideas that can help their achievement levels.
Theoretical Framework

The theoretical framework for this research was based on Abraham Maslow’s Hierarchy of Needs (1943). Maslow’s theories were used to determine possible significant relationships to satisfaction levels for both teachers and students. The decision to utilize the hierarchy of needs for this process was based on Maslow’s premises that supporting and satisfying a person’s basic needs will allow him/her to reach higher levels of safety and security, love and belonging, esteem, and self-actualization, and with that greater personal achievement.

Maslow’s (1943) hierarchy of needs is broken down into five sections. Maslow (1943) stated that we must satisfy each need in turn; however, there are exceptions to the hierarchy and not everyone follows the indicated order. The first step in Maslow’s hierarchy confronts the most obvious needs for survival. Maslow’s first and most basic needs are the physiological and biological needs that include necessary functions such as breathing, eating, drinking, shelter, and heat. This researcher assumed that all teachers have the first and most basic needs met. This research also assumed that students have these basic needs met at school, with the understanding that outside of the school building these needs may not be met. However, for the sake of narrowing the research spectrum and staying focused on aspects that the school can influence, these issues were not examined.

With the first and most basic needs met, Maslow (1943) stated that the needs for safety and security can become realized. For teachers, these needs could be the sense of security one receives from a steady paycheck, retirement, and health care. This study assumed that all teachers have these things and that this need is met. However, Maslow stated that adults may feel a sense of security by holding a job with tenure or other
protections. He also stated that people hold a common preference for familiar rather than unfamiliar things. This study utilized indicators such as a teacher’s age, experience levels, and whether or not he/she had tenure to help draw a relationship to one’s feeling of security. Billingsley and Cross (1992) stated that older more experienced teachers have higher levels of job satisfaction than some of their younger counterparts. However, research does not show a positive correlation between tenure and job satisfaction (Hill, 2009; Nestor & Leary, 2000).

Maslow (1943) stated that for children the sense of safety can be gained from a predictable and orderly world, whereas perceived injustice, unfairness, and inconsistency can cause a child to feel unsafe. Research supports that structured environments are more favorable to satisfaction levels for school aged children (Lee & Rha, 2009). Maslow also stated that “the child needs an organized world rather than an unorganized or unstructured one” (p. 5). In the school setting these things were translated into having a structured classroom and an overall sense of safety while on school grounds. Boulton et al. (2009) found that increasing feelings of safety among students has been linked to higher satisfaction levels. Feelings of safety are also reported to be higher in smaller school settings and may be a result of the structure offered by smaller environments (Bowen, Bowen, & Richman, 2000).

The third level of Maslow’s hierarchy (1943) identifies the need to feel love, affection, and a sense of belonging. Maslow stated that once the physiological and safety needs are satisfied, students will seek to fill the absence of friend, significant others, and/or children. For teachers this sense of belonging could come from the leadership style of the principal and may be achieved through a school atmosphere that uses joint decision making strategies. Bogler (2001) stated that different administrative leadership styles
have been strongly linked to varying levels of teacher satisfaction. Providing positive feedback could also play a role in letting teachers know that their administrators care about them and could strengthen the bonds of the school while also increasing teacher satisfaction (Littrell & Billingsley, 1994; Perrachione, Rosser, & Petersen, 2008).

Teachers who are friendly and supportive toward their students may assist students in feeling that they belong or are cared for while also increasing student satisfaction (Suldo et al., 2009). Teachers who take the time to have quality individual interactions with their students also increase the student’s sense of a supportive environment, as well as satisfaction (Baird, 1973; Suldo et al., 2009). Students also view teachers who use diverse and best teaching practices that help foster collaboration as being supportive, and show increased levels of satisfaction (House, 2005; Suldo et al., 2009). Also, students who are members of a club or athletic team are likely to experience a heightened sense of belonging with their peers and satisfaction with their school (McNeal, 1999; Yin & Lei, 2007).

The fourth level of Maslow’s hierarchy (1943) discusses the importance of esteem. According to Maslow, esteem involves the need for both self-esteem and for the esteem a person gets from others. Maslow stated that humans have a need for a stable, firmly based, high level of self-respect, respect from others, senses of achievement, and feelings of mastery. When this need is satisfied, the person feels self-confident and valuable as a person in the world. When this need is frustrated, the person feels inferior, weak, helpless, and worthless (Maslow, 1943). Having less ambiguous roles may assist teachers in their need for stability while also increasing satisfaction (Perrachione et al., 2008). Higher levels of education or training can also give teachers a sense of mastery and increase the confidence in their ability to effectively teach their content (Perrachione
Maslow (1943) cited that attainment of varying achievements and the receiving of respect can greatly aid in the attainment of esteem needs. For students, a heightened sense of esteem and satisfaction may be achieved through either actual or perceived academic achievement (Dudley & Shawver, 1991; Jacobsen, 1997; Marsh, 1987; Nasser & Hagtvet, 2006; Wachtel, 1998). An increased workload of relevant assignments can also assist in giving students a true sense of accomplishment and increase both their perceived value of a class and level of satisfaction (Dudley & Shawver, 1991; Trautwein, Niggli, Schnyder, & Ludtke, 2009). Respect is also a vital part of the esteem need and healthy classroom interactions that demonstrate a mutual respect between teacher and student can help avoid a breakdown of teaching and learning (Poulou, 2009).

The final tier in Maslow’s (1943) hierarchy is that of self-actualization. Once a person has satisfied all other levels of the hierarchy they may begin to attain a level of self-actualization by realizing personal potential, self-fulfillment, and seeking personal growth (Maslow, 1943). Based on Maslow’s theory, all other needs must be satisfied before one can begin the process of self-actualization. Maslow (1943) stated one does not have to fulfill the needs in any specific order, however, all the other needs do need to be relatively satisfied before one can begin to self-actualize. Satisfying all the lesser needs also creates a basically satisfied person and it is from these people that society can expect the greatest and most productive creativity (Maslow, 1943).

Using Maslow’s hierarchy of needs (1943), the literature review identifies some of the influencing factors and characteristics affecting satisfaction. Of Maslow’s five different needs, the first and last stages were not utilized in sorting the influencing factors and characteristics. The physiological stage was assumed to be met in an attempt to
narrow the research spectrum to influences that a school can impact. The self-actualization stage is only reached after a person has satisfied all other needs (Maslow, 1943); therefore, there are no independent influences that can be measured, correlated, or categorized to fit this stage. Researched influences for both teachers and students are categorized as stated in the theoretical framework and will progress in that same order.

After factors contributing to both teacher and student satisfaction were identified, a relationship between teacher/student satisfaction and student academic achievement was drawn by utilizing current research. The rationale for limiting the relationship to only student academic achievement and not to both teacher and student achievement was that this study viewed each measure of achievement as being the same. For example, in this study the product of a successful teacher was high student achievement in both standardized tests and perceived academic success. The same was the measurement for student success. Thus, the success of the student and teacher both are dependent on the student’s perceived academic success in the classroom and actual achievement level on their standardized test(s). Survey and testing data were then analyzed to determine if a relationship between student achievement and teacher/student satisfaction existed.

**Operational Definitions**

**Student achievement.** Student success on the end-of-course examinations.

**Student satisfaction.** The overall level of enjoyment that one experiences at his/her school.

**Teacher satisfaction.** The perception that one’s school is a good place to work and learn.

**EOC.** North Carolina State administered end-of-course examination meant to measure student proficiency in a given subject.
**EOC passing rates.** Passing rates on EOC examinations are reflected by students who attain a level three or four on their examination. Possible scores range from one to four.

**Rural.** Territory outside metropolitan areas (U.S. Census Bureau, 2011).

**Summary**

Teacher and student satisfaction may not always be the main concern of those looking to improve student achievement at a school. This paper sought to identify a correlation between teacher and student satisfaction and student achievement. Contributing factors that were researched were limited to only those things that could be controlled in the school environment. Maslow’s (1943) hierarchy of needs was used to help identify possible influential factors that may hold significant influence over the satisfaction level of teachers and students.
Chapter 2: Review of Literature

Teacher Satisfaction

Researchers have found that a teacher’s overall satisfaction can be influenced by many different factors. Some of these factors include things that administrators cannot change such as a teacher’s age, years of experience, and issues outside the school’s influence (Billingsley & Cross, 1992; Xin & MacMillian, 1999). Other factors dealing directly with administrators, such as different leadership styles (Bogler, 2001), types of feedback, and support (Littrell & Billingsley, 1994; Perrachione et al., 2008), have also been associated with teacher satisfaction. Job expectations (Perrachione et al., 2008), teacher qualifications, and continuing education (Perrachione et al., 2008; Xin & MacMillian, 1999) are also factors that have been shown to influence teacher satisfaction.

**Safety and security.** Age and experience have been shown to have an effect on teacher commitment and job satisfaction (Billingsley & Cross, 1992; Bolin, 2007). According to a quantitative study of 1,147 educators, Billingsley and Cross (1992) found that older more experienced teachers tend to be more committed to their organizations. Teachers with higher levels of commitment also reported higher levels of job satisfaction, although it is unclear if higher satisfaction leads to higher levels of commitment or vice versa (Billingsley & Cross, 1992). One possibility for this relationship is that perhaps due to the accrued time investments, as well as lack of other career options, older teachers have higher levels of commitment (Billingsley & Cross, 1992).

Maslow (1943) suggested that obtaining job security in the form of tenure can help satisfy one’s need for safety and security, and the longer one remains in the field of education the more likely they are to receive tenure. However, in a quantitative study of 300 teachers it was reported that tenure had no statistically significant effect on job
satisfaction (Hill, 2009). In another study that measured the responses of 165 employees it was found that non-tenure track employees had higher satisfaction ratings than employees that were on track to receive tenure (Nestor & Leary, 2000). However, those with more than 21 years of experience showed higher levels of satisfaction than those with between 1 and 9 years of experience (Nestor & Leary, 2000).

In a study of 500 K-12 teachers, Inman and Marlow (2004) identified that 58% of teachers with 0-9 years of experience ranked job security as the number one reason for staying in the field. The overall role of tenure may be diluted in the field of education if job stability is perceived as being strong. The availability of retirement packages, of other teaching jobs, and the jobs outside of teaching also added to the support system that teachers may feel they have (Inman & Marlow, 2004).

**Love and belonging.** Maslow (1943) stated that people need to feel as though they belong and that they will desire to find a place in their group and that people will strive with “great intensity” in order to find their place (p. 7). According to a quantitative study of 745 elementary, middle, and high school teachers conducted by Bogler (2001), different administrative leadership styles were found to promote staff involvement at varying levels. Bogler (2001) also found that different administrative leadership styles could also encourage varying levels of belonging among the staff. Different administrative styles have also been strongly linked to varying levels of teacher satisfaction (Bogler, 2001). Administrative leadership styles have been broken down into four categories. The first, autocratic, is where the manager is the sole decision maker. He or she does not consult any members of the organization in the decision-making process. The second form is the consultation method where the manager gets advice from other members in the organization and then takes that input and makes the decision he/she feels
is the best. The next form of leadership is the joint decision method in which the manager discusses the problems or issues with other members of the organization and they jointly make the decision on what to do. Lastly is the delegation method in which the manager delegates a specific group or committee to make a necessary decision. That group or committee then carries the responsibility for that decision (Bogler, 2001).

Bogler (2001) stated that evidence has shown that the more involved a teacher is in the decision-making process the more satisfied they are likely to be. “Overall, teachers report greater satisfaction in their work when they perceive their principal as someone who shares information with others, delegates authority, and keeps open channels of communication with the teachers,” whereas, “a low level of teacher involvement in decision making is related to a low level of satisfaction” (Bogler, 2001 p. 666). Hence, principals that practice either the autocratic or consultation method of leadership are more likely to have lower teacher satisfaction than those who practice the joint decision and delegation method of leadership (Bogler, 2001). Collins (2001) stated that leadership “is about creating a climate where the truth is heard and the brutal facts confronted” (p.74). In order to achieve such a climate, a leader must “lead with questions, not answers,” allowing one to gain the insights of those who are more directly involved with certain aspects and to answer and understand “why, why, why” (Collins, 2001, p. 75). According to Collins (2001), a leader must also “engage in dialog and debate, not coercion” (p. 75). The point is not to allow people to have their say so that they can be convinced to buy in to a predetermined decision. Rather, Collins (2001) pointed out that it is to have a true group buy in after people have been actively engaged to search for the best answers. Leaders must also “conduct autopsies, without blame” (p. 77). People in one’s company should be open about mistakes so that they may search for understanding and learning.
According to Morgan (2006), it is impossible to reach this state of openness in an autocratic environment because leadership needs to be diffused, not centralized, and people must have diversified roles. One cannot control every aspect of a school and the sooner that is acknowledged the sooner the school can start to function as a successful institution. According to a questionnaire of 2,202 elementary, middle, and high school teachers, Xin and MacMillian (1999) identified that not only do autocratic leadership styles stifle teacher satisfaction, but they also make it more difficult to implement change, whereas schools using collective or collaborative methods/strategies tend to be more successful.

Positive work experiences such as praise or feedback from administrators has also been shown to provide increased levels of job satisfaction for teachers (Littrell & Billingsley, 1994; Perrachione et al., 2008). McClelland (1961) stated that proper feedback is essential in motivating people, because it allows them to measure their success. Other research has also found that there are positive relationships between leader consideration/support and teacher satisfaction (Billingsley & Cross, 1992). This consideration and support may be the understanding that teachers are human and make mistakes. It could also possibly be the understanding that at times different people go through different things in their lives and may need various types of consideration or support for certain situations. Research has shown that principals largely shape the environment in which teachers work (Billingsley & Cross, 1992; Littrell & Billingsley, 1994). Teacher satisfaction and commitment have been linked to supportive administrative behaviors such as feedback, encouragement, acknowledgement, shared decision making, and collaborative problem solving (Billingsley & Cross, 1992). Research has also found that teachers who perceive their supervisors as supportive report
less stress and burnout than those who do not (Billingsley & Cross, 1992; Littrell & Billingsley, 1994; Singh & Billingsley, 1996). A positive correlation has also been identified between stress levels and job satisfaction. Teachers reporting less stress and less burnout have also reported higher levels of job satisfaction than teachers reporting higher levels of stress and burnout (Billingsley & Cross, 1992; Littrell & Billingsley, 1994; Singh & Billingsley, 1996).

Inman and Marlow (2004) stated that the perceived support beginning teachers receive from their administrators and colleagues is paramount in influencing their decision to either stay or leave the teaching profession. Inman and Marlow (2004) also found it to be important for beginning teachers to have colleagues with whom they can share ideas, make plans, and attempt to solve problems. They also suggested that beginning teachers be mentored by a more experienced teacher who can provide assistance for curriculum development, give advice about lesson plans, and provide feedback about teaching.

Esteem. Collins (2001) stated the importance of buy in and that people must understand their role in the corporation. According to a survey sent to 300 randomly selected Missouri public elementary school teachers in Grades K-5 having 5 or more years of teaching experience, Perrachione et al. (2008) found that teachers with less ambiguous roles and role conflict show higher levels of satisfaction than those reporting high levels of ambiguity. Maslow (1943) stated that people have a desire for stability and that increasing one’s sense of stability can help foster the fourth basic need, esteem. Morgan (2006) discussed the importance of having employees skilled at more than one thing so that an organization is never totally dependent on a single person; however, it is important not to allocate too many tasks to individuals. Although Herzberg, Mausner, and
Block (1959) stated that giving workers increased levels responsibility research warns of the dangers that role overload, i.e. excessive paperwork and high amounts of non-instructional duties, can increase stress which can have an inverse effect on job satisfaction (Billingsley & Cross, 1992; Perrachione et al., 2008). Research also shows that role conflict and inconsistent behaviors from one’s superior have also been shown to lower commitment and job satisfaction (Billingsley & Cross, 1992). However, identifying favored roles of one’s employees may help to stem the feeling of role overload/conflict. Herzberg et al. (1959) stated that one’s job can be enriched if his/her work is rewarding and matches the skills and abilities of the worker. According to an empirical study of 12 elementary school teachers, Cockburn (2000) found that the main reasons teachers enjoyed their jobs were that they could work with children and facilitate their learning, and also that their jobs allowed them the opportunities to have collegial relationships. So it may be that, perhaps, the assignment of extra duties that align with teacher interests should be considered over those who do not when wanting to maintain high levels of teacher satisfaction.

Herzberg et al. (1959) stated that the possibility that one is able to advance his/her skills is a motivating factor that leads to higher levels of satisfaction among workers. Perrachione et al. (2008) found that teachers with high qualifications, such as advanced degrees and professional development, tended to be more satisfied than those with lower qualifications. Utilizing data collected from 2,202 sixth-grade teachers, according to Xin and MacMillian (1999), teachers with higher levels of qualifications believed that because of their qualifications they had the sufficient subject-content knowledge and skills to be able to effectively teach their particular course. Maslow (1943) argued that feelings of self-confidence are a positive indicator that the esteem needs are being
satisfied.

In the same study, Xin and MacMillian (1999) also stated that these same teachers have a more substantial knowledge and resource base from which to draw more current and diverse instructional strategies. Teachers with higher qualifications in their subject area also have the ability to use their subject-content knowledge in conjunction with their instructional techniques to enable students to meet the standards for the course they are being taught (Xin & MacMillian, 1999). For teachers who simply do not know what to do differently, it is difficult to utilize strategies that one has not been trained and likely find frustrating. According to data from the National Center for Educational Statistics, Meek (1998) stated that administrators should be aware that those who received new training through professional development were far more likely to try new teaching strategies in their classrooms. Collins (2001) found that continued professional development is something that employees value, as well as the benefits it repays to one’s organization. All of these factors support Maslow’s (1943) statements that self-esteem is based upon real capacity and achievements and that “satisfaction of the self-esteem need leads to feelings of self-confidence, worth, strength, capability and adequacy” (p. 7).

Student Satisfaction

Research shows a variety of factors can influence student satisfaction; however, for reasons unknown, research is not as prevalent for student satisfaction as it is for teacher satisfaction. Utilizing the available research, this literature review examined factors that contribute to a student’s overall satisfaction. Some of these factors are directly related to safety and structure (Boulton et al., 2009), different learning environments (Drennan, Pisarski, & Kennedy, 2005; Lim et al., 2008), teaching styles (Baird, 1973; House, 2005), use of technology (McGrail, 2007), teacher-student
relationships (Baird, 1973; Suldo et al., 2009), perceived academic success (Dudley & Shawver, 1991; Marsh, 1987), and campus involvement (McNeal, 1999; Suldo et al., 2009).

**Safety and security.** According to Maslow (1943), it is necessary for any mentally healthy and normal individual to have their safety needs satisfied, and a smoothly running peaceful society makes its members feel safe. In a qualitative study of 364 elementary school students, Boulton et al. (2009) found that increasing feelings of safety among students has been linked to higher satisfaction levels. In a quantitative and qualitative study of 70 fourth-grade students, Anderson and Swiatowy (2008) found that while on school campus students reported the highest levels of feeling unsafe when either on the playground or in the halls. The more unstructured the learning environment is, the more likely students are to engage in arguments and off-task behaviors (Gillies, 2003). Maslow (1943) stated that children find safety and security in structured environments and that unorganized and unstructured environments “make the world look unreliable, or unsafe, or unpredictable” (p. 5).

Student and school safety is a prerequisite for a positive social environment (Bowen et al., 2000). In a two-stage stratified sampling design of 2,099 public school students from 93 different schools ranging in grades from sixth to twelfth, Bowen et al. (2000) found that students in schools with enrollments of 1,000-1,399 reported the lowest levels of school satisfaction, school safety, and teacher support, followed by the second largest student enrollment of 800-999. Whereas schools with enrollments up to 399 and 400-599 ranked higher in levels of school satisfaction, safety, and teacher support, with the schools with the lowest enrollments averaging the highest levels of school satisfaction, safety, and teacher support (Bowen et al., 2000). These findings could be a
result of the structure of a smaller school, which promotes a more positive social climate, opportunities for student involvement, and a stronger sense of connection among students and adults (Bowen et al., 2000). Bowen et al. (2000) also stated that a feeling of safety and security is a prerequisite for a positive social climate. However, when applying Maslow’s (1943) hierarchy of needs, evidence would suggest that higher levels of school safety and teacher support result in higher satisfaction ratings based on the fulfillment of one’s need for safety.

**Love and belonging.** Maslow (1943) stated that in general people hunger for some sort of belonging from others in order to fill their need to belong, and that the form of this affection can vary. McClelland (1961) also stated that people have a need for friendly relationships and to gain acceptance from others. According to a mixed methods study of 401 middle school students conducted by Suldo et al. (2009), supportive relationships can be measured and/or defined on many different levels. Emotional support is one in which the student perceives the teacher as one they can trust, and the student knows that the teacher considers him/her to be an important part of the teacher’s life (Suldo et al., 2009). Support that is also given to the student in the form of extra time, skills, or services has been found to have a positive correlation to student satisfaction (Suldo et al., 2009). Student satisfaction has also been shown to increase when support was given by providing feedback on behavior, suggestions for improvement, guidance, advice, or information that can provide a solution for a problem a student is having outside of class work (Suldo et al., 2009). Studies show that students who perceive their teachers as being supportive are more satisfied than those whose teachers are viewed as being less supportive or not supportive (Baird, 1973; Suldo et al., 2009). There is no single way for teachers to be supportive and teachers can show this support in many
different ways. Suldo et al. (2009) found that students perceive teachers to be supportive primarily, “when they attempt to connect with students on an emotional level, use diverse and best-practice teaching strategies, acknowledge and boost students' academic success, demonstrate fairness during interactions with students, and foster a classroom environment in which questions are encouraged” (p. 80).

Positive interactions between teachers and students have been shown to increase students’ perceptions of supportive environments and students have demonstrated higher levels of satisfaction (Baird, 1973; Suldo et al., 2009). However, class size can impact these interactions and research has shown that students in larger classes report less personal interaction with their teachers than those in smaller classes according to a quantitative study of 844 university students conducted by Marsh, Hau, Chung, and Siu (1997). In a multidimensional study of 5,000 undergraduate and graduate classrooms, Marsh (1987) suggested that the class size affects specific dimensions that are associated with highly effective teaching, namely group interaction and instructional rapport. Therefore, smaller class sizes have been shown to be more advantageous to increasing student satisfaction (Marsh, 1987; Nasser & Hagtvet, 2006). However, a review of existing research shows that some larger classes have maintained very high levels of personal interactions by the use of teaching assistants and small discussion groups (Wachtel, 1998).

Teaching styles and strategies have also been shown to have an impact on student satisfaction (Baird, 1973). In a study of 2,670 students at 27 separate 2-year colleges it was found that teachers who work toward helping students apply the ideas, knowledge, and facts that they learn in class to their lives or to the outside world recorded higher levels of student satisfaction than those who did not (Baird, 1973). According to data
gathered from 4,682 Japanese and 8,820 United States eighth graders in the 1999 TIMSS report, utilization of alternative instruction models such as collaborative learning has been shown to increase student enjoyment (House, 2005). Students also showed higher satisfaction ratings toward those teachers who worked to broaden the students’ view of life and gain insights into current real world problems (Baird, 1973). This correlation was further increased when students viewed their teacher as being friendly and supportive both in and out of the classroom (Baird, 1973; Rowland, 2009). Research has shown that positive and supportive relationships between both the student and the teacher have been shown to have a marked impact on student satisfaction (Baird, 1973; Suldo et al., 2009).

McClelland (1961) stated that some people have a motivation and need to be liked and held in popular regard; these people also have a need for friendly relationships and are commonly motivated towards interaction with other people. According to data gathered from 5,772 high school students from 281 schools, involvement in extracurricular activities has been found to provide many advantages to students including serving as a catalyst to help to foster relationships with teachers, coaches, and other students (McNeal, 1999). A quantitative research study of 109 undergraduate students also showed that extracurricular activities encourage social interactions and involve students in their campus community resulting in a more positive relationship with their institution (Yin & Lei, 2007). Research has also demonstrated that relationships that are constructive to a student’s well being have been shown to positively correlate with higher satisfaction levels (Baird, 1973; Suldo et al., 2009).

**Esteem.** Maslow (1943) stated that people, with few exceptions, have a need or desire for esteem and that there are multiple channels by which one can achieve the fulfillment of this need. Maslow (1943) cited that attainment of varying achievements
and the receiving of respect can greatly aid in the attainment of esteem needs. Identifying directly with Maslow’s (1943) attainment of achievements, researchers have found positive correlations between the expected grade a student will receive in a class and their level of satisfaction (Dudley & Shawver, 1991; Jacobsen, 1997; Marsh, 1987; Nasser & Hagtvet, 2006; Wachtel, 1998). The correlation is that the higher grade a student receives or believes they will receive the higher their level of self-satisfaction is (Dudley & Shawver, 1991; Jacobsen, 1997; Marsh, 1987; Nasser & Hagtvet, 2006; Wachtel, 1998). Research has found that some instructors have actually lowered their grading standards to increase student satisfaction and student ratings of their class (Jacobsen, 1997; Wachtel, 1998). Marsh (1987) called this the “grading leniency hypothesis,” which simply states that instructors who give higher-than-deserved grades would commonly receive higher-than-deserved student ratings (p. 21).

Similar to Maslow’s (1943) belief that attainment of varying achievements can add to one’s sense of esteem, McClelland (1961) stated that for those people who are motivated by a sense or feeling of achievement there is a strong need for feedback as to achievement and progress, and a need for a sense of accomplishment. In a longitudinal study of 449 students conducted by Dudley and Shawver (1991) it was shown that an increased workload of relevant assignments could actually improve a student’s perception of a class. A possible explanation for this is that students want to have a feeling of accomplishment, and that learning, even if it is only perceived, is related to higher course and instructor evaluations (Dudley & Shawver, 1991). In a qualitative study of 201 undergraduate students, Marsh (1982) and Marsh (1984) also found that courses with heavier workloads and more rigor tended to be rated higher than unchallenging courses. This is not to say the harder a course the better. McClelland (1961) stated that it is the
attainment of realistic, but challenging goals that can feed one’s motivation. Dudley and Shawver (1991) stated that adding relevant homework to a course may give students a feeling of accomplishment, while also directing the student’s efforts and increasing their evaluation/rating of the instructor and raising their overall satisfaction (Dudley & Shawver, 1991). However, according to a quantitative study of 63 eighth-grade French teachers and their 1,299 students it was reasoned that these finding can be diminished if feedback is not given on things such as homework, either in the form of grades or attached comments by the teacher (Trautwein et al., 2009).

Students are also more likely to put forth more effort if they view the material they are learning as being important (Thelk, Sundre, Horst, & Finney, 2009). In a study of 2,330 engineering students in the United Kingdom researchers found that 20% of the students claimed that boredom and lack of interest were high detractors of student success and highly influential in their decisions to quit (Alpay, Ahearn, Graham, & Bull, 2008). However, motivation was increased when students were involved in issues that they could relate to. Seventy percent of students surveyed reported increased motivation when what they were learning could be transferred into actual use. Sixty four percent reported increased motivation when they were learning practical information. Alpay et al. (2008) stated that students want to be involved and exposed to real life problems and issues and that curriculum focused on this can increase student motivation.

When students are routinely asked to memorize facts or procedures without explanation or conceptual connections it can build negativity and frustration toward the subject area (Willis, 2010). Without clearly evident and personal value of the information the student simply will not care. Students will better understand and be more motivated to understand the content being taught when it is presented in real life ways that they care
about (Willis, 2010).

**Student Achievement**

Research has shown that student achievement is directly related to teacher satisfaction (Caprara et al., 2006; Lee, 2006; Song, 2007) and student satisfaction (Baird, 1973; Lim et al., 2008). Even outside the field of education research has found that job satisfaction has been positively correlated to higher job performance (Edwards et al., 2008; Zhang & Zheng, 2009). Edwards et al. (2008) stated that attitudes toward the job influence behaviors on the job, just as job satisfaction influences job performance. In a research study conducted by Zhang and Zheng (2009) of 292 employees from seven different companies in China, it was found that job satisfaction may strengthen one’s identification, involvement, and emotional attachment to their organization which can, in turn, foster better performance. The importance of the satisfaction-performance relationship is dramatically increased for employers when they have the power to change things that impact worker satisfaction (Zhang & Zheng, 2009). They also found that implementing these interventions can result in both a healthier workforce and increased effectiveness according to a satisfaction survey study conducted by Edwards et al. (2008) of 444 workers at a manufacturing plant.

**Safety and security.** In a quantitative study conducted by Guarino et al. (2006) on 16,308 kindergarten students and 3,305 kindergarten teachers, positive correlations were drawn showing that older and more experienced teachers obtained higher levels of student achievement than their less experienced counterparts. However, this study did not determine if the teacher’s age had any bearing on student achievement. Rather the age of the teachers appeared to be a simple byproduct of more experience and training. The average age and years of experience of teachers meeting the experience criteria of
Guarino et al. (2006) was 50 years of age and 20 years of teaching experience.

In a 6-year longitudinal study of 380 students who tracked students from kindergarten to fifth grade, Buhs, Ladd, and Herald (2006) ascertained that chronic peer mistreatment such as verbal abuse and/or bullying leads to classroom disengagement, which results in decreased achievement. Rejection and abuse by one’s peers may also negatively affect learning opportunities and classroom achievement. Peer rejection can take the form of being ignored or left out of class activities, and peer abuse is best described as being verbally or physically harassed. Buhs et al. (2006) also found that once a student was rejected by his or her peers the rejection and abuse continued year-to-year as did their continued classroom disengagement and decreased achievement.

In a 9-month longitudinal study of students from 12 eighth-grade classrooms in five different schools, Gillies (2003) found that children in structured cooperative groups engaged in more task-related interactions than their peers from unstructured groups. Students in structured cooperative groups were also more likely to use higher order thinking when responding to problem-solving questions than were their peers in the unstructured groups (Gillies, 2003).

**Love and belonging.** Many researchers have found a positive relationship between supportive classroom environments and student achievement (Baird, 1973; Hughes & Kwok, 2007; Hughes, Wen, Kwot, & Loyd, 2008; Suldo et al., 2009). Poulou (2009) stated that it is essential for teachers to create a sense of belonging in their classroom in order to provide students with an ideal learning environment. Suldo et al. (2009) found that positive relationships, providing emotional supports from teachers, were particularly predictive of academic competence. In a 3-year longitudinal study of 784 first-grade students, Hughes et al. (2008) found a positive correlation between
student academic involvement and academic success with supportive teacher relationships. In a 1-year study of 443 first-grade students, Hughes and Kwok (2007) suggested that when students experience a sense of belonging and supportive relationships with teachers and classmates they may become more motivated to actively participate in the classroom. Hughes and Kwot (2007) further stated that students who enjoy a close and supportive relationship with a teacher experience greater academic achievement because they are more engaged in the classroom and they work harder. Teacher support also enables them to persevere in the face of difficulties, accept teacher direction and criticism, cope better with stress, and attend more to the teacher (Hughes & Kwok, 2007). Research that has shown positive academic outcomes have been observed in studies of youth from diverse backgrounds, suggesting that the link between teacher support and student success can be generalized across both culture and ethnicity (Hughes & Kwok, 2007; Suldo et al., 2009).

Increased personal interaction with one’s teacher has been shown to account for greater student achievement (Baird, 1973). In a quantitative study of 241 middle school students, Bowen et al. (2000) stated that consistent relationships with caring adults are critical in terms of promoting a positive social environment. However, an increased ratio of students-per-classroom can diminish student-teacher interactions (Marsh et al., 1997). Popular theory would then transcribe that the lower the number of students per classroom the greater student achievement would be (Borland, Howsen, & Trawick, 2005). According to information gathered from Kentucky’s Department of Education on over 30,000 students, Borland et al. (2005) claimed that this relationship is mixed at best and that the optimal class size is relative depending on many other factors. These factors include such things as current class sizes and their functionality, innate student ability,
teacher ability, and the percentage of students who are college bound. Although teacher and student ability can change from class to class, Borland et al. (2005) found the optimal number of students in their study to be between 21.3 and 23.24 and claimed that lowering class size further would actually have negative effects on student achievement. The claim that lower class size is not always better is based on the belief that students not only learn from teachers, but also from their peers (Borland et al., 2005). An increased number of students increases the skills and knowledge students may gain from each other while also increasing the competitive nature between peers (Borland et al., 2005). However, increasing the number of students too much without increasing the number of teachers can also have a negative correlation with student achievement (Borland et al., 2005).

Research has shown that involvement in extracurricular activities has been positively linked to a student’s academic achievement (Fejgin, 1994; Halvari & Thomassen, 1997; Marsh & Kleitman, 2003; McNeal, 1999; Silliker & Quirk, 1997). Researchers have found many reasons for this correlation (McNeal, 1999); Marsh and Kleitman (2003) stated that extracurricular activities foster a positive identification with the school and school related values, such as academic performance. Fejgin (1994) stated that because both extracurricular activities and academic achievement are voluntary as well as competitive, one can observe the correlation between extracurricular involvement and academic achievement, according to a 2-year longitudinal study of 26,422 eight graders from 1,052 different schools. However, according to a quantitative study of 109 undergraduate students, Yin and Lei (2007) warned that over-involvement in extracurricular activities can actually hamper student achievement. Over-involvement can leave relatively little time and energy left for academic work; over time, fatigue, both mentally and physically, would divert a student’s attention from serious academic work.
Other research offers a more scientific approach to explaining the link between extracurricular activities, namely athletics, and academic achievement by stating that simple muscle movement stimulates the growth of axons (Howard, 2000). Axons are responsible for carrying messages to and from the neurons in the brain. The number of axons is directly related to his or her intelligence. Those who move around more benefit from higher axonal development while those who avoid all but the necessary movements commonly display less intelligence (Howard, 2000). Howard (2000) listed four other effects that aerobic exercise has on the brain that aid in mental functioning.

1. Aerobic exercise improves recall speed.
2. It relaxes one into a state of cortical alertness by releasing endorphins – neurotransmitters that have a relaxing effect on the body.
3. It increases the number of neurotrophins – chemicals that aid in the growth of nerve cells – that are available to the brain, allowing the brain to function better.
4. It increases the capillaries around the neurons in the brain, allowing more blood and oxygen into the brain, increasing brain function and memory retention.

Although generally beneficial, the effects of exercise or athletic participation can be severely diminished if one is forced to participate against one’s will (Howard, 2000). The stress acquired from being forced to participate seems to have dramatically negative effects on the positive gains (Howard, 2000). Utilizing results from a 6-year longitudinal study of 4,250 student athletes, Marsh and Kleitman (2003) found that those overly involved in extracurricular activities may see diminished academic success because of the lack of time they can find to dedicate to their studies. In a study of 123 high school students from five rural, western New York schools, Silliker and Quirk (1997) found that
some of the positive academic gains demonstrated by extracurricular involvement have been shown to waiver in the off seasons. The rationale for these findings was that these students generally have better school attendance in-season versus out-of-season (Silliker & Quirk, 1997). Many of these extracurricular activities also serve as stress releasers, and students are less likely to involve themselves in devious behaviors for fear of being removed from their organization (Silliker & Quirk, 1997).

**Esteem.** Maslow (1943) stated that the attainment of varying achievements can greatly aid in the attainment of esteem. McClelland (1961) stated that attainment of realistic, but challenging achievements can be a motivating factor to people. McClelland (1961) also stated that people who are motivated to achieve will engage in acts to help facilitate their achievement, such as going to college and associating with people who can help them excel. Dembrowsky (1990) stated that teachers need to be aware that self-esteem and academic achievement have lasting impacts on each other. Increased academics result in significant gains to one’s self-esteem and increased self-esteem will improve academic achievement.

In a quantitative and qualitative study of 34 elementary school teachers and principals, 75% of those teachers with advanced training such as National Board Certification and master’s/doctorate degrees, reported higher levels of student academic growth and achievement than their lesser trained counterparts (Vandevoort & Berliner, 2004). Vandervoort and Berliner (2004) also reported that 85.3% of principals surveyed reported that some of their best teachers were National Board Certified.

In a survey of 198 student teachers, Poulou (2007) found that the average confidence of a student teacher is strongly related to the different types and number of classes taken with average Pearson Coefficient results of .71. The results of a study
conducted by Guarino et al. (2006) involving information from 16,308 students and 3,305 teachers showed a positive correlation between student achievement and teacher qualifications, with the higher qualified teachers reporting higher levels of student achievement than those with lower qualifications (Guarino et al., 2006).

Poulou (2007) stated “that a teacher’s confidence in their ability to perform the actions that lead to student learning is one of the few individual characteristics that predicts teacher practice and student outcomes” (p. 1). Those with higher levels of confidence in their abilities see higher levels of student success than those with lower levels of confidence (Poulou, 2007). He also stated that this confidence can come from multiple sources, including experience and training.

Duhon-Haynes (1996) stated that children can be empowered by meeting success, but to do this a teacher must focus on student strengths. Duhon-Haynes also stated that teachers play a critical role in a student’s ability to believe in him or herself and that part of respecting a student is recognizing that their individual learning rates and styles are different from each other. Varying teaching strategies have been shown to have a positive impact on student achievement (Guarino et al., 2006) and teachers with higher levels of confidence are more likely to use alternative teaching strategies (Poulou, 2007). Guarino et al. (2006) also stated that teachers who are trained in a variety of instructional methods were more likely to utilize instructional methods other than traditional lecture. The utilization of traditional lecture format or direct instruction is not the most beneficial method for promoting student achievement (Adeyemi, 2008; Douglas, Burton, & Reese-Durham, 2008; Schroeder, Scott, Tolson, Huang, & Lee, 2007). Research has shown collaborative learning strategies to be more effective in raising achievement levels than direct instruction (Adeyemi, 2008; House, 2005; Schroeder et al., 2007; Wentzel, &
Wentzel and Watkins (2002) suggested the rationale for this is that when working collaboratively students generally experience opportunities for active participation, high levels of engagement, and the use of advanced strategic thinking skills. In a study of 57 eighth-grade students, Douglas et al. (2008) found that students exposed to multiple intelligence instruction methods also showed a considerable increase when compared to those taught using direct instruction. Douglas et al. (2008) offered that the rationale behind these findings is that differing instructional practices can assist both students and teachers in realizing their potential, abilities, and talents.

Dudley and Shawver (1991) stated that adding relevant homework to a course may give students a feeling of accomplishment and raise overall satisfaction. In a study of 28 second- and fourth-grade teachers and their 428 students it was suggested that the positive effects of homework are less significant for elementary school students than high school students (Cooper, Jackson, Nye, & Lindsay, 2001). Length of assignments can also have an effect on attributed gains and research has found that the more time spent on homework, the higher the academic achievement gains were (Keith, Diamond-Hallam, & Fine, 2004). However, Keith et al. (2004) indicated that frequent shorter assignments are more beneficial than infrequent longer ones. According to a study of 63 eighth-grade teachers, the length of assignments was found to be greatly beneficial for lower achieving students who can potentially benefit the most from lengthier reviews (Trautwein et al., 2009).

Trautwein et al. (2009) stated that relevant homework assignments along with proper feedback could raise both a student’s moral and achievement (Trautwein et al. 2009). Information analyzed from the National Educational Longitudinal Study by Keith et al. (2004), which involved 13,546 students, has shown that homework is positively
correlated to student achievement, influencing both grades and achievement test scores (Keith et al., 2004) while also helping to close the achievement gap (Trautwein et al., 2009). Keith et al. (2004) stated that regardless of grade level, homework is beneficial for student learning and academic achievement.

Dembrowsky (1990) stated that there are five critical steps a teacher can take to help raise the esteem levels of students. The first is to develop a positive relationship with the student. Developing a positive relationship forces students to make a commitment to their own growth because students learn more, better, harder, and faster when that teacher has taken the time to create a genuine bond. Dembrosky also stated that drawing attention to the things a student does right, or focusing on the positive, will help students to become internally motivated. Giving a student an assignment back that highlights only the things that they did wrong will not build a student’s self-esteem. Drawing attention to the things students do right and then integrating the things they do wrong into the next lesson, and giving a new assignment with similar problems will help build students’ self-esteem. The students will now be more prepared for these problems and the teacher is setting them up for success, not for failure. The third step is to replace negative expectations of students with positive ones. This could come with the way a teacher phrases an expectation or reinforces a rule. Are students being threatened with discipline referrals if they act a certain way or are they being told that they are being trusted and given a special responsibility? Teachers also need to learn to become facilitators of instruction rather than directors. Questions posed to students should be open-ended and allow students to use their own intuition and knowledge. Students should have a voice in choosing some of the things they are required to do, even if those things seem unimportant to the teacher. Empowering students is key for students to take responsibility
for their own lives. Dembrowsky also stated the importance of introducing students to positive role models. Role models can be extremely powerful influences for students. Role models do not necessarily have to be adults. Dembrowsky stated that at-risk students find useful role models in peers that have overcome adversity because these people demonstrate personal qualities that they would like to emulate in their life.

Summary

Satisfying one’s need for safety and security as described by Maslow (1943) yielded some mixed results for teachers. Billingsley and Cross (1992) stated that teachers who were older and had more experience reported higher levels of commitment and satisfaction. Older and more experienced teachers also reported higher levels of student achievement than their younger and less-experienced counterparts (Guarino et al., 2006). Tenure status appeared to have no effect on job satisfaction (Hill, 2009).

For students, the need to satisfy one’s desire for safety and security in school was transcribed as having a structured classroom environment and having the general feeling of safety within a school. Research identified positive relationships between student’s feelings of safety and structured environments and higher levels of achievement (Gillies, 2003). Buhs et al. (2006) established that unsafe environments can lead to classroom disengagement and decreased student achievement.

Maslow’s hierarchy (1943) also identified the need to feel love, affection, and a sense of belonging. Teachers who are more involved in the decision-making process at their school are more satisfied than those who are not (Bogler, 2001). Perrachione et al. (2008) found that teachers were also more satisfied when working in supportive environments and receiving praise and feedback. Research also suggested a positive relationship between increased teacher satisfaction and higher levels of student
achievement (Caprara et al., 2006).

Students who receive ample support and attention from their teachers show increased satisfaction and achievement (Baird, 1973; Hughes et al., 2008; Suldo et al., 2009). Students who perceived their teachers as being friendly also showed increased levels of satisfaction (Baird, 1973). Involvement in extracurricular activities helps students build positive relationships with their schools and increases student achievement (Hughes & Kwok, 2007; Suldo et al., 2009; Yin & Lei, 2007).

Maslow (1943) identified that people have a desire to satisfy the need for esteem. Overloading teachers with extra duties and paperwork had a negative effect on satisfaction (Billingsley & Cross, 1992; Perrachione et al., 2008). Teachers with increased academic and training qualifications were reported as having increased satisfaction ratings over their lesser-qualified colleagues (Perrachione et al., 2008; Xin & MacMillian, 1999), as well as greater levels of student achievement (Vandervoort & Berliner, 2004). Research also showed that utilizing a variety of instructional techniques was also related to higher student achievement (Adeyemi, 2008; Guarino et al., 2006).

Xin and MacMillian (1999) identified a positive relationship between actual and/or perceived student success and student satisfaction. Dudley and Shawver (1991) stated that an increased workload of relevant assignments can actually improve a student’s perception of a class, the perception of their teacher, and their overall satisfaction. Trautwein et al. (2009) stated that a rigorous and relevant workload can increase student achievement.
Chapter 3: Methodology

Participants

All participants of this study came from a traditional high school in rural North Carolina. The total enrollment of this high school was 818 students, 52.7% of which were White, 42.9% were Black, and 4.2% were Latino or other. Student gender was 49.3% male and 50.7% female. The participants asked to participate in this study included the 51 teachers employed at this school and 436 that were enrolled in courses that administered EOC examinations and had both honors and regular education sections. Two hundred and twenty-five of the students were enrolled in regular education classes and 211 were enrolled in honors level classes. A proxy, with no connection to the students or staff, administered the surveys in an attempt to increase the validity of teacher and student responses. A letter of participation was mailed out to all student households approximately two weeks prior to the parent consent forms. All households were notified in this letter to call the school for any inquires regarding this survey (Appendix A). Parent consent forms were given to all students 2 days prior to the survey being given (Appendix B). The Alert Now phone system was also used to notify all student households of the survey and gave parents an opportunity to call in and ask questions regarding the survey. Parents/guardians also had the opportunity to call in to the school and remove their students from taking the survey. No parents or guardians called to remove their student(s) from participating in the survey; however, only 59.86% of parent consent forms were returned.

All of the 51 employed teachers received a letter of participation in their teacher mailbox 2 weeks prior to the consent form (Appendix C). No response from the teachers was required for the letter of participation. Teachers received the consent form prior to
the start of the following faculty meeting. Teachers who chose to sign the consent form acknowledged their willingness to participate in this survey (Appendix D). The survey was given to those who agreed to participate at the end of the faculty meeting. The survey data from teachers and students were analyzed according to class type, i.e. honors and regular education. The purpose of separating teachers and students according to curriculum was to determine if there was a relationship between student and teacher satisfaction and academic achievement and to determine if the level of one’s classes affects satisfaction.

**Instruments**

Following a review of literature, the researcher developed two surveys aimed at measuring factors that affect teacher and student satisfaction. The decision to utilize the hierarchy of needs for this process was based on Maslow’s (1943) premises that supporting and satisfying peoples’ basic needs would allow them to realize their potential, attain self-fulfillment, and seek personal growth. The data gained from these surveys were analyzed to determine if relationships existed between these factors and levels of student and teacher satisfaction. The data was also analyzed to determine if there was a relationship between satisfaction and academic achievement. Finally, the data was analyzed to determine if there was a relationship between the level of academic course being taught or enrolled in and satisfaction.

**Teacher survey.** Teachers who agreed to participate received a 24-item survey that was categorized into two sections. The first section asked for basic information aimed at identifying the respondents by age, gender, experience, level of education, level of certification, and level of classes they were teaching (Appendix E). The second section of the survey utilized a 5-point Likert scale, with the number 1 indicating that the teacher
or student strongly disagreed with the question/statement, 2 indicating the respondent disagreed with the question/statement, 3 indicating that they may sometimes agree and disagree with the question/statement, 4 indicating that the respondent agreed with the question/statement, and number 5 indicating that the respondent strongly agreed with the statement. The combination of these two question types were used to determine how satisfied the teachers were in their current school.

In order to determine how well the teachers’ needs for safety and security were being met, respondents were first asked to identify their age cohort and their years of experience in education (Appendix E). According to Bolin (2007), the degree of job satisfaction one experiences increases with age and length of service. Teachers were also asked to identify their tenure status (Appendix E). Maslow (1943) suggested that obtaining job security in the form of tenure can help satisfy one’s need for safety and security. The attainment of tenure was prominent in Maslow’s theory and was included as a proxy in this study, although Hill (2009) found tenure to play a statistically insignificant role in teacher satisfaction. Utilizing the 5-point Likert scale, teachers were also asked to rank their sense of job security (Appendix E). The purpose of this question was to decipher whether or not a relationship existed between age, experience, and/or tenure with job security.

In order to determine how well each school was meeting the teacher’s need for love and belonging all questions and statements were ranked utilizing the 5-point Likert scale. Questions and statements rated teacher interpretations of administrative leadership styles, praise, positive and meaningful feedback, and support. Teachers were asked to rank four statements to best determine if the leadership style at each school was autocratic, consultative, joint-decision, or delegative (Appendix E) per definitions
provided by Bogler (2001). The questions that were asked to determine praise, positive and meaningful feedback, and support were all garnished from section 7.3 of the 2010 North Carolina Working Conditions Survey. However, there were changes made to the questions in the area of response options. The North Carolina Working Conditions Survey utilizes a 4-point Likert scale and this study used a 5-point Likert scale. The working conditions survey also asked some sweeping questions meant to target the teacher’s view of the entire faculty, whereas the questions in this study applied to only the teacher taking the survey (Appendix E). The final two questions in this section asked teachers to rank their sense of belonging at their school and to identify their perception of how much or how little the building level administrators care about them (Appendix E). Working in tandem, these two questions were used to decipher whether or not a relationship existed between leadership styles, praise, positive and meaningful feedback, and/or support with a sense of belonging and the knowledge that you are cared about.

In order to determine how well each school was meeting the need for esteem, as outlined by Maslow (1943), this survey measured the clarity of one’s professional expectations (role ambiguity), appropriate time for staff development, and actual teacher credentials (Appendix E). Perrachione et al. (2008) found that teachers with less ambiguous roles and role conflict show higher levels of satisfaction than those reporting high levels of ambiguity. Maslow stated that people have a desire for stability and that increasing one’s sense of stability can help foster the esteem need. To determine if teachers felt as though they were appropriately protected from non-instructional duties they were asked to rate their perception of question (g) from section 2.1 of the North Carolina Teacher Working Conditions Survey (Appendix E). Research warns that an overload of non-instructional duties can increase stress, which can have an adverse effect
on job satisfaction (Billingsley & Cross, 1992; Perrachione et al., 2008). In order to gage appropriate time for staff development, teachers rated their perception of question (a) from section 8.1 of the North Carolina Teacher Working Conditions Survey (Appendix E). Teachers were also asked to state their perceptions of the value of professional development by responding to question (m) from section 8.1 of the North Carolina Teacher Working Conditions Survey (Appendix E). Teachers were also asked to identify their level of certification and highest level of education. Xin and MacMillian (1999) stated that because of the increased confidence and either perceived or actual knowledge of content, teachers with higher levels of education and training show higher levels of satisfaction. In order to determine if a relationship existed between the perception of staff development, certification level, and level of formal education with increased confidence, teachers were asked to rank how well they believed their knowledge allowed them to implement best teaching strategies (Appendix E).

In order to identify a teacher’s overall satisfaction they were asked to rank question 10.6 from the North Carolina teacher working condition survey. This question used a 5-point Likert scale which is a change from the 4-point scale used on the state survey (Appendix E).

**Student survey.** Students received an 18-item survey. The survey was categorized into two sections. The first section asked basic multiple choice questions aimed at identifying the respondent’s age, gender, grade level, perceived GPA, average number of homework assignments per week, extracurricular involvement, and level of courses taken (Appendix F). The second section of the survey questions utilized a 5-point Likert scale and used the same indicators as the teacher survey. The combination of these two question types were used to determine how satisfied the students were in their current
school.

In order to determine how well the students’ needs for safety and security were being met, students were asked to rate how safe they felt in structured environments and less-structured environments (Appendix F). Students were also asked to identify if they had been bullied and the type of bullying they were subjected to while attending their current institution (Appendix F). Boulton et al. (2009) found that increased feelings of safety among students had been linked to higher satisfaction levels. Maslow (1943) stated that children find more safety and security in structured environments than in unstructured environments. In a study conducted by Anderson and Swiatowy (2008), it was found that while on school campus students reported the highest levels of feeling unsafe when they were in an unstructured environment such as on a playground or in the hallways.

Maslow (1943) stated that people need to feel love, affection, and a sense of belonging. Six items were used to identify how well each school was meeting the students’ needs for love and belonging. The first items in this section asked students to rank their perceptions of how much their teachers cared about them as individuals and how friendly they viewed their teachers as being (Appendix F). Suldo et al. (2009) stated that teachers can be supportive of students in different ways, including being emotionally supportive, by letting students know that they consider them to be important. Students were also asked to identify how much they felt their teachers try to help them succeed (Appendix F). Suldo et al. (2009) stated that teachers can show their support to students by providing the necessary academic support. Students were also asked to rate perceived teacher fairness (Appendix F). Suldo et al. (2009) further stated that to build supportive relationships students need to recognize that teachers treat students fairly. Maslow (1943)
also stated the importance that perceived fairness has in fulfilling the need of love and belonging. As a result, students were asked to rank their perceptions of how fair their teachers treat all students. Participation in extracurricular activities has been shown to foster positive relationships with teachers, coaches, and other students (McNeal, 1999), while also resulting in positive relationships with that institution (Yin & Lei, 2007). As a result, students were asked to identify the number of extracurricular activities they regularly participated in on a yearly basis. Average class size has also been shown to influence student satisfaction based on the amount of time and personal interactions teachers can give to each student (Marsh et al., 1997). Average class size was not represented as an item on this survey; instead this information was gained through class enrollment data at the school.

There were six items for students to respond to in order to determine how well the student’s needs for esteem were being met at the school level. Four of the items required students to respond via the Likert scale and two were basic multiple choice. In order to directly address Maslow’s (1943) statement that attainment of varying achievements and the receiving of respect can greatly aid in the attainment of esteem, students were asked to identify their perceived academic strength (Appendix F), the grades they normally receive, and the amount of respect they feel their teachers give them (Appendix F). Nasser and Hagtvet (2006) identified a relationship between higher levels of student satisfaction and higher course grades. Students were also asked to identify their weekly homework allocations and their perceived relevance (Appendix F). In research conducted by Dudley and Shawver (1991), it was shown that an increased workload of relevant assignments can improve student perception of a class. It was reasoned that these relevant assignments could give students a feeling of accomplishment. However, these feelings of
accomplishment can be diminished if proper feedback is not given (Trautwein et al., 2009). Based on these implications, students were also asked to rate their perception of “My teachers always give me feedback on assignments I have turned in either in the form of a grade, written comments, or verbal response” using the Likert scale.

In order to identify a student’s overall satisfaction, they were asked to rank question 10 from the student learning condition survey. This question was ranked using a 5-point Likert scale which is a change from the 4-point scale used on the state survey (Appendix F).

**Procedures**

**Design.** Teacher survey groups were distinguished according to level of curriculum taught, i.e. honors or regular education. Student survey groups were also distinguished according to the level of courses taken, i.e. honors or regular education. The survey utilized a computer-based approach through the Survey Monkey website, www.surveymonkey.com. Results of the survey cannot be traced to any specific individual or to any specific group of individuals, i.e. Ms. X’s fourth-period class. The rationale for using this software was to expedite the data collection and analysis process. Paper and pencil surveys were at hand as a substitute in case of any unforeseen technical problems, though none were needed. The survey was administered to students during their first period class promptly following morning announcements. Teachers received their survey at the start of a faculty meeting to ensure that they were not distracted by their classroom duties and because of the ease of distribution to the entire teacher population. This research design could be replicated in any traditional school setting without need for modification.

**Data analysis.** The data from the surveys were compiled and analyzed using
Statistical Package for the Social Sciences (SPSS). Each section of the data, i.e. safety and security, love and belonging, and esteem, were analyzed categorically to see if a relationship existed between each section and student or teacher satisfaction. The validity of statistically significant and insignificant relationships was deciphered using correlation coefficients, $R^2$ values, and identifying the p-value. Data in all three sections were analyzed to help identify existing associations between feelings of safety and security, love and belonging, and esteem with one’s overall satisfaction and achievement by using a regression analysis. The closer the resulting $R^2$ value was to one, the more likely the variance in the dependent variable could be related to the independent variable. The same tests were used for analyzing the relationship between teacher satisfaction and the previously mentioned categories.

Student and teacher satisfaction were also analyzed alongside curricular involvement. This was done to see if a relationship existed between satisfaction and achievement using correlation coefficients, p values, and $R$ squared values. The data were extracted from Survey Monkey, analyzed using SPSS, and statistically significant correlational values were identified when the corresponding p-value was less than or equal to .05.
Chapter 4: Results

This chapter presents the data analysis and study findings by research question. The purpose of this dissertation was to determine the extent which curricular enrollment, teacher satisfaction, and student satisfaction affect student achievement as measured by their pass rates on EOC exams. At the end of this chapter a summary of the major themes, provided by the data from this study, is listed in order according to research question.

This chapter presents the results of the surveys taken by both teachers and students. The data analysis also includes the research school’s archived end-of-course (EOC) test scores from 2011. Of 51 available teachers asked to complete this quantitative survey 41, or 80.4% completed the survey. Fourteen of the responding teachers were male and 27 were female. The majority of the respondents, 39%, were between the ages of 21-30, 17.1% were between 31-40, 22% were between 41-50, and 22% were over 51 years of age. The questions were administered electronically through the Survey Monkey website. The survey, Appendix E, included 24 total items, seven of which were in a simple a, b, c format while the remaining 17 used a 5-point Likert scale. The items recorded on the Likert scale received weighted values ranging between 1 and 5. The selection of strongly disagree, was worth 1 value point ascending to 5 value points for the selection strongly agree. These weighted values were averaged together to easily indicate overall perceptions for different subgroups.

Of the 436 possible students available to participate in this survey, 290 elected to participate. Out of the 290 that participated in this survey, 27 were removed from the analysis for response inconsistencies, leaving the valid response/participation rate at 60.3% or 263 students. All student participants were high school students between the
ages of 14-19; 26.2% of the respondents were ninth graders, 24% were tenth graders, 27% were eleventh graders, and 22.8% were seniors. The survey, Appendix F, included 18 items, seven of which were in a simple a, b, c format while the remaining 11 used a 5-point Likert scale. The response values of the student survey mimicked that of the teacher survey.

This study utilized regression analyses, single or multiple as needed, to determine the statistical significance of the data. The use of regression analysis for this study was determined based upon the need to infer relationships between two or more quantitative variables. It is important to note that a major weakness of a regression analysis is that the identified relationship between the independent and dependent variable are often circular, X explains Y and Y explains X, and therefore a regression analysis cannot be used to establish causality. Data from the regression analysis included correlation coefficients, R² values, and p-values. Correlation coefficients were reported as a value between -1 and 1 and were used to express the relationship between two variables. The R² value serves to identify the amount of common variance shared by the identified variables (Gay, 1996). Gay (1996) stated that the interpretation of the correlation coefficient depends on how it is used and is dependent on the sample size, also known as the n value. In this study the statistical significance of correlation coefficients and R² values differed between the data gathered from the teacher and student surveys. The difference of statistical significance between the data gathered from the teacher and student surveys can be explained because only 41 teachers participated in this study while 263 students participated. The closer a coefficient is to 1, the stronger the identified relationship is, whether positive (1) or negative (-1) (Gay, 1996). However, Gay (1996) also stated that the smaller the sample size, the larger correlation coefficient is needed to signify statistical significance. Smaller
sample sizes also reduce the degree of freedom associated with interpreting the correlations, requiring more robust coefficients to attain significance.

In order to identify a 95% confidence level that the data results were not chance occurrences, a p-value of .05 or less was used to identify a statistically significant relationship. A value of .05 or less also signifies that the corresponding correlation coefficient and $R^2$ are statistically significant. P-values less than or equal to .01 or 0.001 are reported as $\leq .01$ or $\leq .001$.

**Research Question 1**

The first research question in this study asked, “What is the relationship between the level of content taught and student achievement as measured by their performance on EOC exams.” In this study, student achievement was measured by their pass rates on EOC exams. The 2011 testing data from the research school showed that the EOC pass rates for the honors classes were 94.07%, while the regular education classes reported a 48.36% pass rate.

Additionally, the researcher looked at student gender, age, extracurricular involvement, average class grade, perceived success, and reported bullying alongside curricular enrollment to determine if there was a relationship between the variables and curricular enrollment. The data from this study showed that a slightly higher, but relatively insignificant, percentage of females were involved in honors level classes than were males, 61% and 58.2%, respectively. Students who were 14 years of age reported the highest involvement in honors level courses out of all the recorded age groups at 72.2%, followed by 65.6% students who were 15 years of age. Students who were 16 years of age reported a 45.8% honors involvement, while students 17 years of age had a 64% involvement rate in honors level courses. Students who were either 18 years of age
or older reported a 50% involvement rate in honors level courses. The correlation coefficient, -1.22, yielded a statistically significant association between student age and curricular enrollment. This negative correlation signified an inverse relationship between older students and overall satisfaction levels. The R² value between the two variables equaled .015, or only 1.5% of the variance in student age and curricular involvement can be identified as co-variant between the two variables. The p-value of .0479 exceeded the threshold for statistical significance; therefore an inverse relationship between student age and curricular enrollment was established.

Table 1

*Analysis of Student Age vs. Curricular Enrollment*

<table>
<thead>
<tr>
<th>Correlation Coefficient</th>
<th>R² value</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Analysis Values</td>
<td>-.122</td>
<td>.015</td>
</tr>
</tbody>
</table>

The data between extracurricular involvement and one’s level of curricular engagement were also analyzed. The data showed that as the number of extracurricular activities students were involved in increased, the more likely they were to be enrolled in honors level courses. Students who were not involved in any extracurricular activities cited a 40.5% enrollment rate in honors classes, and a 59.5% enrollment rate in regular education level classes. Students involved in one extracurricular activity cited a 54.3% enrollment rate in honors level classes and a 47.7% enrollment rate in regular education classes. Students involved in two extracurricular activities cited a 72.3% enrollment rate in honors classes, and a 27.7% enrollment rate in regular education level classes. Students involved in three extracurricular activities cited a 83.3% enrollment rate honors level
classes and a 16.7% enrollment rate in regular education level classes. Students involved in four extracurricular activities cited a 87.5% enrollment rate in honors level classes and a 12.5% enrollment rate in regular education classes. Students who participated in more than four extracurricular activities cited a 91.7% enrollment rate in honors level courses and a 8.3% enrollment rate in regular education level classes. The correlation coefficient between extracurricular involvement and the level of curricular involvement, .337, yielded a statistically significant relationship when tested further. The R² value between the two variables equaled .112, or 11.2% of the variance in extracurricular involvement and curricular enrollment could be identified as co-variant between the two variables. The p-value, ≤.001, exceeded the threshold for statistical significance; therefore, there is a relationship between student involvement in extracurricular activities and curricular enrollment.

Table 2

*Analysis of Extracurricular Involvement vs. Curricular Enrollment*

<table>
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<tr>
<th>Correlation Coefficient</th>
<th>R² value</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Analysis Values</td>
<td>.337</td>
<td>.112</td>
</tr>
</tbody>
</table>

Students were asked to report the average class grade they received in order to analyze if there was any difference between a student’s average course grade and their level of curricular involvement. The data indicated that 87.8% of the students who reported averaging A’s were honors level students and 12.2% were regular education students. Approximately 57% of students who reported averaging B’s were honors level students and approximately 43% were regular education students. Only 19.6% of students
averaging C’s were honors level students and 80.4% were regular education students. Twenty percent of students averaging D’s were honors level students and 80% were regular education students. Twenty eight point six percent of students averaging F’s were honors level students and 71.4% were regular education students. The correlation coefficient, .204, yielded a positive association between the two variables. The R² value, .042, between the two variables indicated that 4.2% of the variance in a student’s average class grade and curricular enrollment could be identified as being co-varient between the two variables. The p-value, ≤.001, exceeded the threshold for statistical significance and signifies a relationship between a student’s average class grade and their level of curricular enrollment.

Table 3

*Analysis of Average Class Grade vs. Curricular Enrollment*

<table>
<thead>
<tr>
<th>Correlation Coefficient</th>
<th>R² value</th>
<th>p-value</th>
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</thead>
<tbody>
<tr>
<td>Analysis Values</td>
<td>.204</td>
<td>.042</td>
</tr>
</tbody>
</table>

When responding to the survey statement “I feel as though I am successful in school,” students in honors classes perceived themselves as being more successful than students in regular education classes. Honors level students reported a higher weighted success perception of 4.18 out of 5.00. While regular education level students reported a weighted success perception of 3.61 out of 5.00, the correlation coefficient, .273, yielded a positive association between the curricular level a student is enrolled in and their perceived success. The R² value, .072, indicated that 7.2% of the variance in perceived success and the level of curriculum a student is enrolled in could be identified as co-
variant between the variables. The p-value, ≤.001, exceeded the threshold for statistical significance and signified a relationship between students’ perceived successes and their level of curricular enrollment.

Table 4

Analysis of Perceived Success vs. Curricular Enrollment

<table>
<thead>
<tr>
<th>Analysis Values</th>
<th>Correlation Coefficient</th>
<th>R² value</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>.273</td>
<td>.072</td>
<td>≤.001*</td>
</tr>
</tbody>
</table>

Data were also gathered to analyze the existence of a relationship between the levels of curricular involvement and the frequency which one reported being bullied. The data collected showed that out of the 62.4% of the students surveyed who reported that they had never been bullied approximately half were honors level students and half were regular education students. Thirty three point one percent of honors level students reported that they were sometimes bullied as opposed to 15.1% of regular education students. Students who reported being bullied often were nearly divided equally between honors and regular education level students at 1.3% and 1.9%, respectively. Those students who claimed to be bullied daily were also nearly divided equally between honors and regular education level students at 10.2% and 10.4%, respectively. The correlation coefficient, .085, failed to signify an association between the frequency which one is bullied and their level of curricular involvement. The R² value between the two variables equaled .007, and indicated that less than 1% of the variance in the frequency that one is bullied and curricular enrollment could be identified as co-variant between the variables. The p-value, .1714, failed to meet or exceed the threshold for statistical significance and
therefore did not identify a relationship between the frequency which one is bullied and their level of curricular enrollment.

Table 5

*Analysis of Reported Bullying vs. Curricular Enrollment*

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<tr>
<th>Correlation Coefficient</th>
<th>R² value</th>
<th>p-value</th>
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<tbody>
<tr>
<td>Analysis Values</td>
<td>.085</td>
<td>.007</td>
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**Research Question 2**

The second research question asked, “What is the relationship between the level of teacher satisfaction and student achievement.” In this study, teacher satisfaction was measured by one’s overall perception that the research school was a good place to work and learn. The data collected from this study did not reveal any significant relationship between teacher satisfaction and student achievement. The data received from the teachers who participated in this survey indicated that 87.1% were currently teaching regular education level classes, 36.6% were currently teaching honors level courses, 26.8% were teaching both honors and regular education level courses, and approximately 3% taught neither. When the level of curriculum taught was analyzed, regardless of whether the class was an honors class or regular education, the data yielded no relationship. The correlation coefficient, -.100, failed to signify a statistically significant association between the two variables, and the R² value indicated that only 1% of the variance in level of curriculum being taught and teacher satisfaction was identified as covariant. The p-value, .5353, failed to meet the threshold for statistical significance and did not signify a relationship between the two variables.
When those teachers who taught both regular education and honors level courses were removed from the data analysis so that the data would only reflect the 60.3% of respondents that taught solely regular education classes and the 9.8% of teachers who taught solely honors level classes, the data still did not show a statistically significant relationship. Regular education teachers actually reported a slightly higher, although not significant, overall weighted satisfaction average of 4.14, compared to 4.07 reported by those teaching honors level courses. The correlation coefficient, .078, indicated no significant statistical association between the variables, and the R² value, .006, indicated that less than 1% of the variance in the curriculum level that each teacher taught and teacher satisfaction could be identified as co-variant between the variables. The p-value, .6294, failed to meet the threshold for statistical significance and did not signify a relationship between the level of curriculum taught and overall job satisfaction.

Table 6

*Analysis of Student Achievement vs. Teacher Satisfaction*

<table>
<thead>
<tr>
<th>Analysis Values</th>
<th>Correlation Coefficient</th>
<th>R² value</th>
<th>p-value</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>.078</td>
<td>.006</td>
<td>.6294</td>
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</table>

Additionally, the researcher looked at teacher gender, age, experience, tenure status, perceived job security, school leadership style, administrative feedback, certification level, formal education, and role ambiguity alongside teacher satisfaction to identify if the data presented any relationship between the independent variables and teacher satisfaction. The data from this study indicated that 65.9% of the respondents in this study were female while the remaining 34.1% were male. The females reported an
overall weighted satisfaction value of 4.22 while males reported a weighted satisfaction value of 4.00. The correlation coefficient, .174, did not signify a statistically significant association between teacher gender and satisfaction. The R² value, .030, indicated that 3% of the variance in teacher gender and satisfaction could be identified as co-variant between the variables. The p-value, .2780, failed to meet the threshold for statistical significance and no relationship between teacher gender and satisfaction could be identified.

Table 7

Analysis of Teacher Gender vs. Teacher Satisfaction

<table>
<thead>
<tr>
<th>Analysis Values</th>
<th>Correlation Coefficient</th>
<th>R² value</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>.174</td>
<td>.030</td>
<td>.2708</td>
</tr>
</tbody>
</table>

Of the 41 teachers who completed this survey, 39% were between the ages of 21-30 and reported a weighted satisfaction value of 4.06. Seventeen percent of the respondents were between the ages of 31-40 and reported a weighted satisfaction value of 4.29. Twenty two percent of the respondents were between the ages of 41-50 and reported a weighted satisfaction value of 4.22. Twenty two percent of the respondents were 51 years or older and reported a weighted satisfaction value of 4.11. The correlation coefficient for age, .047, failed to provide a statistically significant association between a teacher’s age and their overall satisfaction level. The R² value, .002, indicated that less than 1% of the variance in teacher age and satisfaction could be identified as co-variant between the variables. The p-value, .7708, failed to meet the threshold for statistical significance and no relationship between teacher age and overall satisfaction could be
Table 8

*Analysis of Teacher Age vs. Teacher Satisfaction*

<table>
<thead>
<tr>
<th>Analysis Values</th>
<th>Correlation Coefficient</th>
<th>R² value</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>.047</td>
<td>.002</td>
<td>.7708</td>
</tr>
</tbody>
</table>

Of the 41 teachers who participated in this survey, 46.3% reported having between 1 and 5 years of experience; this same cohort reported and overall weighted satisfaction average of 4.00. There were 19.5% of the teachers who indicated having 6-15 years of experience, and reported an overall satisfaction average of 4.38. Nearly 30% of the teachers surveyed had between 16-25 years of experience and reported a satisfaction average of 4.09. There were only 7.3% of the teachers surveyed that indicated that they had 26 or more years of experience; this cohort reported a weighted satisfaction average of 4.67. The correlation coefficient value between teacher experience and satisfaction was reported to be .335 and signified a statistically significant association between the two variables. The R² value, .112, indicated that 11.2% of the variance in teacher age and satisfaction could be identified as co-variant between the variables. The p-value, .0323, exceeded the threshold for statistical significance; therefore, a relationship could be established between a teacher’s years of experience and teacher satisfaction.
Table 9

*Analysis of Years of Experience vs. Teacher Satisfaction*

<table>
<thead>
<tr>
<th>Correlation Coefficient</th>
<th>R² value</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Analysis Values</td>
<td>.335</td>
<td>.112</td>
</tr>
</tbody>
</table>

Out of the 41 teachers who completed this survey, 44% reported having tenure while 56% did not. When compared to overall satisfaction, teachers with tenure reported a 4.28 rating average while those without tenure reported a 4.04 average satisfaction rating. When tenure status and overall satisfaction were analyzed, a correlation coefficient of -.191 failed to establish a statistically significant association. The R² value, .037, indicated that only 3.7% of the variance in the variables could be identified as covariant. The p-value, .2305, did not meet the threshold for statistical significance; therefore, no relationship between teacher tenure status and overall teacher satisfaction could be established.

Table 10

*Analysis of Tenure Status vs. Teacher Satisfaction*

<table>
<thead>
<tr>
<th>Correlation Coefficient</th>
<th>R² value</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Analysis Values</td>
<td>-.191</td>
<td>.037</td>
</tr>
</tbody>
</table>

The data were also used to analyze one’s sense of job security to overall satisfaction. Out of the 41 teachers who participated in this survey, approximately 5% cited low levels of perceived job security; these same teachers reported a weighted
satisfaction average of 4.00. Approximately 22% of teachers cited that they sometimes felt a strong sense of job security; these same teachers reported a weighted satisfaction average of 4.11. Approximately 73% of teachers cited that they felt a strong sense of job security; these same teachers reported a weighted satisfaction average of 4.22. Further research showed a correlation coefficient of .194 failed to establish a statistically significant association between the variables. The $R^2$ value, .038, indicated that only 3.8% of the variance in the variables could be identified as co-variant. The p-value, .2335, did not meet the threshold for statistical significance; therefore, no relationship between perceived job security and overall teacher satisfaction could be established.

Table 11

*Analysis of Perceived Job Security vs. Teacher Satisfaction*

<table>
<thead>
<tr>
<th>Correlation Coefficient</th>
<th>$R^2$ value</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Analysis Values</td>
<td>.194</td>
<td>.038</td>
</tr>
</tbody>
</table>

Approximately 34% of teachers perceived that the school’s principal demonstrated the characteristics of an autocratic leader; these same teachers recorded a weighted satisfaction average of 4.07. Approximately 76% of teachers perceived that the school’s principal demonstrated the characteristics of a consultative leader and recorded a 4.10 weighted satisfaction score. Forty five percent of teachers perceived that the school’s principal demonstrated joint decision-making characteristics and these teachers reported a weighted satisfaction average of 4.11. Approximately 63% of teachers felt as though the principal demonstrated the characteristics of a delegative leader and reported a weighted satisfaction value of 4.16. The correlation coefficients for each perceived
leadership style were -.117, -.046, .141, and .081, respectively. The $R^2$ value, .048, indicated that 4.8% of the variance in perceived leadership style and satisfaction could be identified as co-variant between the variables. The p-value, .7708, failed to meet the threshold for statistical significance and did not signify a relationship between perceived leadership style and overall teacher satisfaction.

Table 12

*Analysis of Perceived Leadership Style vs. Teacher Satisfaction*

<table>
<thead>
<tr>
<th>Analysis Values</th>
<th>Correlation Coefficient</th>
<th>$R^2$ value</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Autocratic</td>
<td>-.117</td>
<td>.048</td>
<td>.7708</td>
</tr>
<tr>
<td>Consultative</td>
<td>-.046</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Joint-Decision</td>
<td>.141</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Delegative</td>
<td>.081</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Data were also analyzed to determine if the perception of useful administrator feedback would influence overall teacher satisfaction. Approximately 12% of teachers reported that the feedback they received from their administrators was not useful; these same teachers reported a weighted satisfaction average of 3.50. Approximately 17% of teachers reported that they sometimes felt that the feedback they received from their administrators was useful; these same teachers cited a 3.71 weighted satisfaction average. Approximately 70% of teachers reported that they felt as though the feedback they received from their administrators was useful; these same teachers cited a 4.37 weighted satisfaction average. When these variables were analyzed, a correlation coefficient of .505 established a statistically significant association between useful administrator feedback and teacher satisfaction. The $R^2$ value, .255, indicated that 25.5% of the variance in the variables could be identified as co-variant. The p-value, $\leq .001$, exceeded
the threshold for statistical significance, signifying a relationship between a teacher’s perception of feedback received from administration and overall teacher satisfaction.

Table 13

*Analysis of Perceived Usefulness of Administrator Feedback vs. Teacher Satisfaction*

<table>
<thead>
<tr>
<th>Correlation Coefficient</th>
<th>R² value</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Analysis Values</td>
<td>.505</td>
<td>.255</td>
</tr>
</tbody>
</table>

Of the 41 teachers who completed this survey, 22% reported that they were lateral entry and held a weighted satisfaction average of 4.33. Approximately 84% of teachers were NC State certified and recorded a weighted satisfaction average of 4.11. While 2.4% of teachers reported that they held national board certification, these teachers recorded a weighted satisfaction average of 5.0. The correlation coefficient value of -.073 failed to yield a statistically significant association between teacher certification and teacher satisfaction. The R² value between the two variables equaled .005, or less than 1% of the variance among the between the variables could be considered as co-variant. The p-value, .6483, failed to meet the threshold for statistical significance; therefore, no relationship could be established between a teacher’s certification level and teacher satisfaction.

Table 14

*Analysis of Certification Level vs. Teacher Satisfaction*

<table>
<thead>
<tr>
<th>Correlation Coefficient</th>
<th>R² value</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Analysis Values</td>
<td>-.073</td>
<td>.005</td>
</tr>
</tbody>
</table>
Approximately 66% of surveyed teachers reported that they held a Bachelor’s degree, while the remaining 34% reported that they held a Master’s degree. The weighted satisfaction for those with a Bachelor’s degree was recorded as 3.96 while those with a Master’s degree was recorded as 4.46. The coefficient value, .431, established a statistically significant association between higher levels of formal education and higher levels of teacher satisfaction. The R² value, .186, indicated that 18.6% of the variance in formal education level and satisfaction could be identified as co-variant between the variables. The p-value, ≤.01, exceeded the threshold for statistical significance and signified a relationship between a teacher’s level of formal education and teacher satisfaction.

Table 15

*Analysis of Level of Formal Education vs. Teacher Satisfaction*

<table>
<thead>
<tr>
<th></th>
<th>Correlation Coefficient</th>
<th>R² value</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Analysis Values</td>
<td>.431</td>
<td>.186</td>
<td>≤.01*</td>
</tr>
</tbody>
</table>

Data were also analyzed to determine if role ambiguity would influence overall teacher satisfaction. Approximately 5% of teachers reported high levels of role ambiguity; these same teachers reported a weighted satisfaction average of 3.50. Approximately 15% of teachers reported that they sometimes felt a sense of role ambiguity; these same teachers cited a 3.67 weighted satisfaction average. Approximately 80% of teachers reported that they felt low levels of role ambiguity; these same teachers cited a 4.38 weighted satisfaction average. When these variables were analyzed, a correlation coefficient of .110 failed to establish a statistically significant association.
between one’s perceived role ambiguity and teacher satisfaction. The $R^2$ value, .012, indicated that just over 1% of the variance in the variables could be identified as co-

variant. The p-value, .4946, failed to meet the threshold for statistical significance and no relationship between role ambiguity and overall teacher satisfaction could be established.

Table 16

*Analysis of Perceived Role Ambiguity vs. Teacher Satisfaction*

<table>
<thead>
<tr>
<th>Correlation Coefficient</th>
<th>$R^2$ value</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Analysis Values</td>
<td>.110</td>
<td>.012</td>
</tr>
</tbody>
</table>

**Research Question 3**

The third research question asked, “What is the relationship between the level of student satisfaction and student achievement.” The data received from the students who participated in this survey indicated that 59.7% of the students were enrolled in honors level courses and 40.3% were enrolled in regular education classes. When the course level that a student was enrolled in was analyzed alongside student satisfaction, the data failed to show a relationship between the two variables. When the results were cross tabulated, students who indicated that they were enrolled in honors level courses reported a weighted satisfaction average of 2.86, while those enrolled in regular education classes reported a 2.82 weighted satisfaction average. The coefficient value, -.015, offered no support to suggest a statistical association between the variables. The $R^2$ value equaled 0.000, suggesting that 0% of the variance in student satisfaction and student achievement was co-

variant. The p-value, .806, failed to meet the threshold for statistical significance and did not signify a relationship between student satisfaction and the curricular level a
student is enrolled in.

Table 17

Analysis of Student Satisfaction vs. Student Achievement

<table>
<thead>
<tr>
<th>Analysis Values</th>
<th>Correlation Coefficient</th>
<th>R² value</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>-.015</td>
<td>.000</td>
<td>.806</td>
</tr>
</tbody>
</table>

Additionally, this researcher looked at student gender, age, sense of safety in structured and unstructured environments, frequency of reported bullying, extracurricular involvement, perceived teacher support, average course grade, and perceived success alongside student satisfaction to identify if the data presented any relationship between the independent variables and student satisfaction. Student gender was analyzed to determine if there was any influence between one’s gender and his/her overall satisfaction level. In this study, female students reported a weighted satisfaction average of 2.90 while males reported a slightly lower weighted satisfaction average of 2.79. The correlation coefficient, -.042, did not support a statistically significant association between gender and satisfaction. The R² value, .002, implied that less than 1% of the variance in student age and student satisfaction could be identified as co-variant. The p-value, .4934, failed to meet the threshold for statistical significance and could not be used to identify a relationship between student gender and student satisfaction.
The data in this study were used to analyze reported age alongside overall student satisfaction. In this study, students who indicated that they were 14 years of age reported the highest weighted satisfaction average of 3.22. Students who were 15 years of age reported a weighted satisfaction average of 2.95 and students who were 16 years of age reported a 2.74 weighted satisfaction average. Students who were 17 years of age reported a 2.86 weighted satisfaction average and students who were 18 years of age reported a 2.39 weighted satisfaction average. Those students who indicated that they were over 18 years of age reported the lowest weighted satisfaction average of 1.38. The correlation coefficient, .224, indicated that there is a statistically significant association between student age and overall satisfaction. The R² value, .050, indicated that 5% of the variance in the variables could be considered as co-variant. The p-value, ≤.01, exceeded the threshold for statistical significance and signified the existence of a relationship between student age and student satisfaction.

Table 19

*Analysis of Student Age vs. Student Satisfaction*

<table>
<thead>
<tr>
<th>Correlation Coefficient</th>
<th>R² value</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Analysis Values</td>
<td>.224</td>
<td>.050</td>
</tr>
</tbody>
</table>
Data were analyzed to determine if the feeling of safety in structured environments such as classrooms would influence overall student satisfaction. Approximately 13% of students did not report feeling safe while in structured school environments; these same students reported a weighted satisfaction average of 1.49. Approximately 25% of students reported that they sometimes felt safe while in structured school environments; these same students cited a 2.51 weighted satisfaction average. Approximately 60% of students reported that they felt safe while in structured school environments; these same students cited a 3.22 weighted satisfaction average. When the variables were analyzed the correlation coefficient, .452, established a statistically significant association between perceived respect and teacher satisfaction. The $R^2$ value, .204, indicated that 20.4% of the variance in the variables could be identified as covariant. The p-value, $\leq .001$, exceeded the threshold for statistical significance; therefore, a relationship could be established between the feeling of safety in structured school environments and student satisfaction.

Table 20

*Analysis of Feeling of Safety in Structured Environments vs. Student Satisfaction*

<table>
<thead>
<tr>
<th>Correlation Coefficient</th>
<th>$R^2$ value</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Analysis Values</td>
<td>.452</td>
<td>.204</td>
</tr>
</tbody>
</table>

Data were also analyzed to determine if the feeling of safety in unstructured environments such as hallways and bathrooms would influence overall student satisfaction. Approximately 22% of students did not report feeling safe while in unstructured school environments; these same students reported a weighted satisfaction
average of 2.10. Approximately 24% of students reported that they sometimes felt safe while in unstructured school environments; these same students cited a 2.56 weighted satisfaction average. Approximately 54% of students reported that they felt safe while in unstructured school environments; these same students cited a 3.09 weighted satisfaction average. When the variables were analyzed the correlation coefficient, .494, established a statistically significant association between perceived respect and teacher satisfaction. The R² value, .244, indicated that 24.4% of the variance in the variables could be identified as co-variant. The p-value, ≤.001, exceeded the threshold for statistical significance; therefore, a relationship could be established between the feeling of safety in unstructured school environments and student satisfaction.

Table 21

*Analysis of Feeling of Safety in Unstructured Environments vs. Student Satisfaction*

<table>
<thead>
<tr>
<th></th>
<th>Correlation Coefficient</th>
<th>R² value</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Analysis Values</td>
<td>.494</td>
<td>.244</td>
<td>≤.001*</td>
</tr>
</tbody>
</table>

The data collected from the students who agreed to participate in this survey indicated that 62.4% of the responding student body had never been bullied. Approximately 26% reported that they were bullied sometimes. The smallest group of students, only 1.5%, indicated that they were bullied often. Approximately 10% reported that they were bullied on a daily bases. Out of the students who reported that they had been bullied, 83% said that it was in the form of being made fun of or picked on and 61.97% cited that they had been verbally threatened at some point. Twenty five percent cited electronic sources such as Facebook or text messages and 21.46% cited that they
had experienced some form of physical assault. Students who reported that they were never or only sometimes bullied cited the highest weighted satisfaction averages, while those who reported they were bullied often or daily cited the lowest weighted satisfaction averages. The correlation coefficient, .331, was statistically significant and established an association between the frequency that one reported being bullied and their overall satisfaction. The $R^2$ value, .011, indicated that 1.1% of the variance in the frequency of reported bullying and overall student satisfaction was co-variant. The p-value, $\leq .001$, exceeded the threshold for statistical significance and could be used to identify a relationship between the frequency of reported bullying and overall student satisfaction.

Table 22

*Analysis of Reported Bullying vs. Student Satisfaction*

<table>
<thead>
<tr>
<th>Correlation Coefficient</th>
<th>$R^2$ value</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Analysis Values</td>
<td>.331</td>
<td>.011</td>
</tr>
</tbody>
</table>

Data were also analyzed to determine if active teacher support would influence overall student satisfaction. Those students who did not believe their teachers actively supported them cited a weighted satisfaction average of 1.78. Students who believed their teachers sometimes supported them cited a weighted satisfaction average of 2.34. Those students who believed their teachers actively supported them cited a 3.29 weighted satisfaction average. When the variables were analyzed the correlation coefficient, .423, established a statistically significant association between perceived job security and teacher satisfaction. The $R^2$ value, .179, indicated that 17.9% of the variance in the variables could be identified as co-variant. The p-value, $\leq .001$, exceeded the threshold for
statistical significance; therefore, a relationship could be established between teacher support and student satisfaction.

Table 23

*Analysis of Teacher Support vs. Student Satisfaction*

<table>
<thead>
<tr>
<th>Correlation Coefficient</th>
<th>R² value</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Analysis Values</td>
<td>.423</td>
<td>.179</td>
</tr>
</tbody>
</table>

As part of this study, students were asked to identify the number of extracurricular activities that they were involved in with the choices being zero to over four. In relation to overall satisfaction, the weighted student satisfaction average increased with each additional extracurricular activity, but then began to descend once students indicated that they participated in four or more than four clubs or teams. Students who participated in zero extracurricular clubs or teams had a weighted satisfaction average equaling 2.57; one team or club equaled 2.86; two equaled 3.02; three equaled 3.50; four equaled 3.38; and over four equaled 2.08. Based on the data gathered and the decline in satisfaction with those students participating in four or more than four extracurricular activities, a clear correlation could not be drawn between increased involvement in extracurricular clubs and teams and student satisfaction. The correlation coefficient of .094 did not support a positive association between the number of extracurricular activities a student was involved in and overall student satisfaction. The R² value, .009, suggested that less than 1% of the variance in extracurricular participation and student satisfaction were covariant. The p-value, .1280, failed to meet the threshold for statistical significance and did not signify a relationship between the variables.
Data were also gathered to analyze overall class grades alongside student satisfaction. Students reporting that they generally received A’s and B’s recorded the highest overall weighted satisfaction averages of 2.97. Those students reporting that they generally received C’s recorded weighted satisfaction averages of 2.63. Students generally receiving D’s recorded a 2.22 weighted satisfaction average, and students receiving mostly F’s recorded a 1.14 weighted satisfaction average. The correlation coefficient value, .207, yielded a statistically significant association between overall class grades and overall satisfaction. The R² value, .043, implied that 4.3% of the variance in average class grade and student satisfaction could be identified as co-variant. The p-value, ≤.001, exceeded the threshold for statistical significance and could be used to identify a relationship between average class grade and student satisfaction.

Table 25

*Analysis of Average Class Grade vs. Student Satisfaction*

<table>
<thead>
<tr>
<th>Correlation Coefficient</th>
<th>R² value</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Analysis Values</td>
<td>.207</td>
<td>≤.001*</td>
</tr>
</tbody>
</table>

When responding to the survey statement “I feel as though I am successful in
school,” students in honors classes perceived themselves as being more successful than students in regular education classes. Honors level students reported a higher weighted success perception of 4.18 out of 5.00, while regular education level students reported a weighted success perception of 3.61 out of 5.00. The correlation coefficient, .273, yielded a positive association between the curricular level a student is enrolled in and his/her perceived success. The R² value, .072, indicated that 7.2% of the variance in perceived success and the level of curriculum a student is enrolled in could be identified as co-variant between the variables. The p-value, ≤.001, exceeded the threshold for statistical significance and signified a relationship between students’ perceived successes and their level of curricular enrollment.

Table 26

*Analysis of Perceived Success vs. Curricular Enrollment*

<table>
<thead>
<tr>
<th>Correlation Coefficient</th>
<th>R² value</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Analysis Values</td>
<td>.273</td>
<td>.072</td>
</tr>
</tbody>
</table>

Data were also analyzed to determine if perceived respect from teachers would influence overall student satisfaction. Those students who did not believe their teachers respected them cited a weighted satisfaction average of 1.64. Students who believed their teachers sometimes respected them cited a weighted satisfaction average of 2.51. Those students who believed their teachers always respected them cited a 3.31 weighted satisfaction average. When the variables were analyzed the correlation coefficient, .470, established a statistically significant association between perceived respect and teacher satisfaction. The R² value, .221, indicated that 22.1% of the variance in the variables
could be identified as co-variant. The p-value, ≤.001, exceeded the threshold for statistical significance; therefore, a relationship could be established between perceived teacher respect from teachers and student satisfaction.

Table 27

*Analysis of Respect from Teachers vs. Student Satisfaction*

<table>
<thead>
<tr>
<th>Correlation Coefficient</th>
<th>R² value</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Analysis Values</td>
<td>.470</td>
<td>.221</td>
</tr>
</tbody>
</table>

**Summary**

**Research Question 1.** (a) A positive relationship was identified between curricular enrollment and student pass rates on EOC exams; (b) student age was a factor in determining curricular enrollment; (c) student gender was not a factor in determining curricular enrollment; (d) the more extracurricular activities a student was involved in the more likely they were to be enrolled in honors level courses; (e) honors level students reported having higher course averages than regular education students; (f) a positive relationship was identified between curricular enrollment and perceived success; and (g) there was no relationship between the frequency of reported bullying and curricular enrollment.

**Research Question 2.** (a) Student achievement was not found to be an influencing factor to overall teacher satisfaction; (b) gender was not found to be an influencing factor to overall teacher satisfaction; (c) age was not found to be an influencing factor in overall teacher satisfaction; (d) higher levels of teacher experience were found to be an influencing to overall teacher satisfaction; (e) tenure status was not
found to be an influencing factor to overall teacher satisfaction; (f) perceived job security
was not found to be an influencing factor to overall teacher satisfaction; (g) perceived
leadership style of the principal was not found to be an influencing factor to overall
teacher satisfaction; (h) perceived usefulness of administrative feedback was found to be
an influencing factor to overall teacher satisfaction; (i) the level of teacher certification
was not found to be an influencing factor to overall teacher satisfaction; (j) the level of
formal education was found to be an influencing factor to overall teacher satisfaction; and
(k) perceived role ambiguity was not found to be an influencing factor to overall teacher
satisfaction.

Research Question 3. (a) Student EOC pass rates were not found to be an
influencing factor to overall student satisfaction; (b) student gender was not found to be
an influencing factor to overall student satisfaction; (c) age was found to an influencing
factor to overall Student satisfaction; (d) the feeling of safety in structured environments
was found to be an influencing factor to overall student satisfaction; (e) the feeling of
safety in unstructured environments was found to be an influencing factor to overall
student satisfaction; (f) the frequency a student reported being bullied was found to be an
influencing factor to overall student satisfaction; (g) active teacher support was found to
be an influencing factor to overall student satisfaction; (h) extracurricular involvement
was not shown to be an influencing factor to overall student satisfaction; (i) the average
class grade was found to be an influencing factor to overall student satisfaction; (j)
perceived success was found to be an influencing factor to student satisfaction; and (k)
perceived respect from teachers was found to be an influencing factor to overall student
satisfaction.
Table 28

*Independent Variables vs. Curricular Enrollment*

<table>
<thead>
<tr>
<th></th>
<th>Correlation Coefficients</th>
<th>R² values</th>
<th>p-values</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student Age vs. Curricular Enrollment</td>
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<td>.015</td>
<td>.0479</td>
</tr>
<tr>
<td>Extracurricular Involvement vs. Curricular Enrollment</td>
<td>.337</td>
<td>.112</td>
<td>≤.001*</td>
</tr>
<tr>
<td>Class Grade vs. Curricular Enrollment</td>
<td>.204</td>
<td>.042</td>
<td>≤.001*</td>
</tr>
<tr>
<td>Perceived Success vs. Curricular Enrollment</td>
<td>.273</td>
<td>.072</td>
<td>≤.001*</td>
</tr>
<tr>
<td>Reported Bullying vs. Curricular Enrollment</td>
<td>.085</td>
<td>.007</td>
<td>.1714</td>
</tr>
</tbody>
</table>
Table 29

*Independent Variables vs. Teacher Satisfaction*

<table>
<thead>
<tr>
<th></th>
<th>Correlation Coefficients</th>
<th>R² values</th>
<th>p-values</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student Achievement vs. Teacher Satisfaction</td>
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<td>.006</td>
<td>.6294</td>
</tr>
<tr>
<td>Teacher Gender vs. Teacher Satisfaction</td>
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<td>.030</td>
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<td>.7708</td>
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<tr>
<td>Years of Experience vs. Teacher Satisfaction</td>
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<td>.112</td>
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<td>Tenure Status vs. Teacher Satisfaction</td>
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<td>.037</td>
<td>.2305</td>
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<td>Perceived Job Security vs. Teacher Satisfaction</td>
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<td></td>
<td>Consultative = -.046</td>
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<td>Joint-Decision = .141</td>
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<td>Delegative = .081</td>
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<td>Role Ambiguity vs. Teacher Satisfaction</td>
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<td>.4946</td>
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Table 30

*Independent Variables vs. Student Satisfaction*

<table>
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<th>Correlation Coefficients</th>
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<td>Feeling of Safety in Structured Environments vs. Student Satisfaction</td>
<td>.452</td>
<td>.204</td>
<td>$\leq .001^*$</td>
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<tr>
<td>Feeling of Safety in Unstructured Environments vs. Student Satisfaction</td>
<td>.494</td>
<td>.224</td>
<td>$\leq .001^*$</td>
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<td>Reported Bullying vs. Student Satisfaction</td>
<td>.331</td>
<td>.011</td>
<td>$\leq .001^*$</td>
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<td>Teacher Support vs. Student Satisfaction</td>
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<td>$\leq .001^*$</td>
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<td>Extracurricular Involvement vs. Student Satisfaction</td>
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<td>.009</td>
<td>.1280</td>
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<td>Average Class Grade vs. Student Achievement</td>
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<td>.043</td>
<td>$\leq .001^*$</td>
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<td>Perceived Success vs. Student Achievement</td>
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<td>Perceived Respect vs. Student Achievement</td>
<td>.470</td>
<td>.221</td>
<td>$\leq .001^*$</td>
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Chapter 5: Discussion

The purpose of this study was to determine if there is a relationship between teacher and student satisfaction and academic achievement. This study was designed to determine if Maslow’s (1943) hierarchy of needs could be used to help identify contributing factors to both teacher and student satisfaction and if higher satisfaction levels could be attributed to higher levels of student achievement. Based on the discrepancy in the school’s testing data between honors and regular education classes, the decision was made to analyze the relationship between satisfaction levels and instructional levels.

This chapter is organized to discuss the results pertaining to each of the three research questions in this study. A research question is presented and then followed by a discussion of the findings and other findings linked to relevant research. Following the research findings, the limitations and recommendations for further research are discussed.

Research Question 1

The first research question in this study asked, “What is the relationship between the level of content taught and student achievement as measured by success rates on EOC exams.” Student achievement, as defined by this study, was measured by EOC passing rates. The data from this study supported that students involved in honors level courses have higher achievement levels on their EOCs than their regular education counterparts. Honors level students also perceived themselves as being more successful than did regular education students. This could have resulted based on the expectation of academic achievement that is attached to honors level courses and students may feel more confident of their success by simply being enrolled in such a course. Dembrowsky (1990) stated that one’s academic achievement and esteem have a lasting impact on each
other and that increased academics result in significant gains to one’s self-esteem, and increased self-esteem will improve academic achievement.

Another explanation for the increased rates of perceived success among honors level students reported in this study is the reported course grades. The data from this study showed that honors level students reported having higher course grades than did students in regular education classes. The reviewed literature (Dudley & Shawver, 1991; Marsh, 1987; Jacobsen, 1997; Nasser & Hagtvet, 2006; Wachtel, 1998) supported a correlation between one’s academic grade and student success. It would appear logical that a cohort of students making better in-class grades and scoring higher on their EOCs would report higher feelings of success than a cohort that has lower in-class grades and EOC scores. Maslow (1943) stated that the attainment of varying achievements can greatly aid one’s sense of esteem.

In addition to the research questions, the survey gathered demographic data that would be used to run correlations with such areas as student extracurricular participation. The data from this study found a positive correlation between student achievement and extracurricular participation. Student responses indicated that the more extracurricular activities one was involved in the more likely they were to be enrolled in honors level courses. Research conducted by McNeal (1999) and Marsh and Kleitman (2003) stated that extracurricular activities foster a positive identification with the school and school related values, such as academic performance. Fejgin (1994) cited that the existing correlation between participation in extracurricular activities and academic achievement could result because both academic achievement and extracurricular activities are voluntary as well as competitive.
Research Question 2

The second research question asked, “What is the relationship between the level of teacher satisfaction and student achievement as measured by success rates on EOC exams.” Current research on this subject cites that higher levels of worker satisfaction are correlated with higher levels of employee success and/or productivity, and lower levels of satisfaction are correlated with lower levels of productivity and/or success (Durbin, 1991; Edwards et al., 2008; Netemeyer et al., 2010). However, the data collected from this study does not reveal any existing relationship or correlation between teacher satisfaction and student achievement. These results may, in part, be explained from the anonymity of the survey. Since the study could not be traced back to a particular teacher or that teacher’s class, it is not possible to analyze the data on a more individualized level. Rather, this study was designed to interpret curriculum groups as a whole in order to determine if teachers involved in honors curriculum would demonstrate a statistically significant difference in their weighted satisfaction score than those teaching regular education classes, which the data do not support.

In addition to the research questions, the survey gathered data that was used to run correlations with such areas as age, experience, tenure status, perceived job security, school leadership style, administrative feedback, certification level, formal education, and role ambiguity alongside teacher satisfaction. These factors were identified to determine if data presented any relationships between the independent variables and teacher satisfaction.

Teacher age and experience were analyzed to determine if they contributed to overall teacher satisfaction. The years of experience that one has in education was found to have a positive correlation to teacher satisfaction; however, age did not. This
differentiation could likely be explained because not all older teachers are necessarily more experienced than their younger associates. There are many people who enter the field of education later in life and after having other careers or raising their children. Teachers who choose to stay in the field of education also presumably do so because they either enjoy their occupation or have come to accept their role in the school. Billingsley and Cross (1992) suggested that these results could be explained since older and more experienced teachers have greater accrued time investments, as well as, a lack of other career options.

Maslow (1943) suggested that the attainment of tenure would add to one’s sense of safety and security. However, the data collected in this study do not support a relationship between tenure status and one’s sense of job security nor do the data support a relationship between either tenure status or perceived job security and overall satisfaction. This could, in part, be due to economic and budgetary cuts in education resulting in less confidence in one’s job security regardless of tenure status. The data from this study corresponds to the study by Hill (2009) and does not recognize any statistical evidence that tenure status positively impacts teacher job satisfaction.

The perceived leadership style of the principal did not show a statistically significant relationship to teacher satisfaction. Bogler (2001) stated that the more involved teachers are in the decision-making process the more satisfied they are likely to be. Morgan (2006) and Xin and McMillin (1999) stated that autocratic leadership would not promote teacher satisfaction. It may be likely that this study did not replicate results found by previous research because teachers were not forced to rank their responses of perceived leadership styles. Therefore, if teachers believed that their principal exhibited characteristics of an autocratic leader and a delegative leader they could rank each
characteristic the same while simultaneously reporting the same overall teacher satisfaction score for both leadership styles.

The usefulness of feedback received from administrators was also examined in order to determine if there was a relationship to overall teacher satisfaction. The data from this study supported a relationship between these variables. Current research supports that praise or feedback from administrators has been shown to provide increased levels of job satisfaction for teachers (Perrachione et al., 2008). A possible explanation for this could be that when feedback is perceived as useful, teachers view that feedback as a form of support. Ediger (2004) stated that the perception of support from administration reduces teacher attrition.

The level of certification and level of formal education were examined to determine if they contributed to overall teacher satisfaction. Although one’s level of certification did not report a statistically significant relationship, a relationship was identified between one’s level of formal education and overall satisfaction. Xin and MacMillian (1999) stated that teachers with higher qualifications were found to perceive themselves as being more knowledgeable of their content areas and more skilled in teaching methodology. It is likely that because one’s certification level is often directly attributed to one’s level of formal education, it is not the certification level that imbues a teacher with a sense of knowledge and skill mastery. Rather, that knowledge and confidence is gained in the form of the time and effort it takes to receive an advanced degree or a degree directly associated with one’s subject content.

Role ambiguity was analyzed to determine if a relationship existed with overall teacher satisfaction. Similar to current research by Perrachione et al. (2008), this study found that teachers with less ambiguous roles and role conflict showed higher levels of
satisfaction than those reporting high levels of ambiguity. However, the difference in weighted satisfaction averages did not attribute to a statistical significance when a regression analysis was used to determine a relationship between the variables.

At the beginning of this study the researcher theorized that factors attributing to the fulfillment of Maslow’s (1943) hierarchy of needs would help identify variables that would positively influence overall teacher satisfaction. The researcher tried to identify factors in line with Maslow’s (1943) hierarchy of needs that could be controlled and identified in a school environment. Contributing factors that may have influenced teacher satisfaction were theorized for safety and security, love and belonging, and esteem, according to Maslow’s (1943) explanations of each of these needs. To satisfy the need for safety and security it was theorized that one’s age, experience, tenure status, and perceived job security would serve as the independent variables examined in this study. To satisfy the need for love and belonging it was theorized that the perceived leadership style of the principal and perceived usefulness of administrator feedback would serve as the independent variables examined in this study. To satisfy the need for esteem it was theorized that student success, level of teacher certification, level of formal education, and perceived role ambiguity would serve as the independent variables examined in this study. The following figures show the theorized influences that were conceived at the start of this study as determined according to Maslow’s (1943) hierarchy of needs and the identified influences to teacher satisfaction that were revealed by the analyzed data gathered from the teacher survey.
Figure 1. Theorized Influencing Factors for Teacher Satisfaction – Maslow/McWherter

Figure 2. Identified Influencing Factors for Teacher Satisfaction – McWherter
Research Question 3

The third research question asked, “What is the relationship between the level of student satisfaction and student achievement as measured by success rates on EOC exams.” When the course level a student was enrolled in was compared to the student satisfaction survey data, no relationship was found between the two. Although students in honors level courses did report higher feelings of success and higher levels of EOC performance, no relationship was found between the satisfaction levels. These finding are contradictory to current research that stated student satisfaction has been positively correlated to student academic achievement (Lim et al., 2008). Brown et al. (2004) stated that satisfaction is an important aspect of student success, and higher satisfaction levels have been reported to coincide with higher levels of academic achievement. Similar to the teacher results survey, student anonymity may be partially responsible for the differentiation between previous research and this study. However, none of the contributing factors to student satisfaction were found to be specific to influencing either group of students associated with the different curriculum levels. It is the belief of this researcher that the data from this study lend to the perception that student satisfaction may be based on the whole school environment and not dependent on curricular or program involvement.

In addition to the research questions, the survey gathered data that would be used to analyze the data in such areas as perceived safety in both structured and unstructured school environments, frequency of reported bullying, extracurricular involvement, quality time spent helping students succeed, respect from teachers, average course grade, and perceived success alongside student satisfaction. These factors were identified to determine if data presented any relationships between the independent variables and
student satisfaction.

The feeling of perceived safety in both structured environments such as classrooms, and unstructured environments such as hallways and bathrooms were analyzed to determine if a relationship with overall student satisfaction existed. The analyzed data indicated that the feeling of safety in both structured and unstructured school environments resulted in higher levels of student satisfaction. These findings support current research conducted by Boulton et al. (2009) that found that increasing feelings of safety among students has been linked to higher satisfaction levels. It may be likely that when students do not have to be concerned with physical or mental harm, they have the ability to spend more of their time building positive and supportive relationships with their peers. Bowen et al. (2000) stated that a feeling of safety and security is a prerequisite for a positive social climate.

Another set of variables reviewed in this subgroup had to do with reported frequency and types of reported bullying. As would be expected, the majority of students who reported being the victim of bullying cited that verbal bullying was the most proficient type of bullying experiences. A positive relationship was identified between the frequency that a student reported being bullied and both their feelings safety and security and overall satisfaction. Bowen et al. (2000) stated the importance that the feeling of safety has for developing a positive social climate, and a positive social climate likely could not be perceived if a student was under constant threat or torment from bullies.

This study also sought to analyze student perception of the time and support that teachers were able to give them. The data from this study showed there was a positive relationship between students who perceived their teachers as actively trying to help them
succeed and overall student satisfaction. Studies have shown that students who perceived their teachers as being supportive were more satisfied than those who viewed their teachers as being less supportive or not supportive (Baird, 1973; Suldo et al., 2009). It is possible that students view support in different ways, and it is also likely that teachers give support to students differently depending on their needs. Current research shows that teachers who support their students in the form of extra time, skills, and/or services have been found to have a positive correlation to student satisfaction (Suldo et al., 2009).

Although the data from this study did not demonstrate a relationship between extracurricular participation and student satisfaction, the data did provide some interesting associations. The results of the study seem to indicate a positive relationship between extracurricular involvement and student satisfaction so long as the student did not participate in an excess of three activities. Students who participated in four activities still had a significantly higher satisfaction rating than those who did not participate in any teams or clubs, but the continued growth in satisfaction ended with the third extracurricular team or club. Students who participated in more than four teams or clubs reported lower satisfaction levels than students who did not participate in any activities. This could be explained through role overload in much the same way that Yin and Lei (2007) warned that over-involvement in extracurricular activities can actually hamper student achievement. Yin and Lei also (2007) cited that over-involvement can leave relatively little time and energy left for academic work, and cause fatigue, both mentally and physically.

An interesting relationship between extracurricular participation and reported bullying was also identified. The data gathered suggested that the more extracurricular activities a student was involved in the less likely they were to be bullied. This could be
attributed to a greater network of friends or increased popularity that results from more social interaction. Yin and Lei (2007) stated that extracurricular activities encourage social interactions. McNeal (1999) stated that involvement in extracurricular activities has been found to provide many advantages to students, including serving as a catalyst helping to foster relationships with teachers, coaches, and other students. Research has also reported that relationships that are constructive to a student’s well-being have been shown to positively correlate with higher satisfaction levels (Baird, 1973; Suldo et al., 2009).

The data collected in this study did indicate a relationship between a student’s average course grade and their satisfaction. Studies reviewed for this research support these findings (Dudley & Shawver, 1991; Jacobsen, 1997; Marsh, 1987; Nasser & Hagtvet, 2006; Wachtel, 1998). A student’s perceived success was also found to have a statistically significant relationship to student satisfaction. A minor correlation was identified between a student’s perceived success and satisfaction level. This could, in part, be explained because a student who struggles in school and has to work diligently to receive a C may still report similar feelings of success as a student who receives straight A’s.

The level of respect students feel they receive from their teachers was also analyzed to determine if a relationship existed between received respect and overall student satisfaction. Maslow (1943) cited that attainment of respect can aid in the attainment of esteem need. The data from this research established that there was a relationship between the perceived level of respect a student receives from their teachers and their overall satisfaction. It is possible that students who believe that they receive respect from their teachers are better able to build positive relationships. Dembrowsky
(1990) stated that the first way to teacher can help raise the esteem levels of students is to develop a positive relationship with them.

At the beginning of this study, the researcher theorized that factors attributing to the fulfillment of Maslow’s (1943) hierarchy of needs would help identify variables that would positively influence overall student satisfaction. The researcher tried to identify factors in line with Maslow’s (1943) hierarchy of needs that could be controlled and identified in a school environment. Contributing factors that may have influenced student satisfaction were theorized for safety and security, love and belonging, and esteem, according to Maslow’s (1943) explanations of each of these needs. To satisfy the need for safety and security it was theorized that one’s feeling of safety and security in both structured and unstructured school environments would serve as the independent variables examined in this study. To satisfy the need for love and belonging, it was theorized that the perception of adequate time spent with the students helping them succeed, and extracurricular participation would serve as the independent variables examined in this study. To satisfy the need for esteem, it was theorized that student success, average course grade, perceived success, and perceived respect from teachers would serve as the independent variables examined in this study. The following figures show the theorized influences that were conceived at the start of this study as determined according to Maslow’s (1943) hierarchy of needs and the identified influences to teacher satisfaction that were revealed by the analyzed data gathered from the student survey.
Figure 3. Theorized Influencing Factors for Student Satisfaction - Maslow/McWherter

Figure 4. Identified Influencing Factors for Student Satisfaction – McWherter
Limitations

A possible threat to the internal validity of this study is the limited variability of the dependent variables. The lack of variability in these variables is caused by only having five metrics to define teacher and student satisfaction and only four metrics to define student achievement. This lack of variability may attribute to the lack of correlation identified between the independent and dependent variables.

The external validity of this study may have been jeopardized because this study used volunteers from only one high school in the southern part of the United States. The teachers and students who took part in this study may not be generalized or typical of all teachers/students in the United States. In order to validate these findings to a wider population, this study would need to be replicated across multiple populations while using more metrics to identify the dependent variables; similar results would need to be drawn from those sources.

Conclusions

The results from this study did not support that higher levels of teacher and/or student satisfaction could be attributed to curricular orientation or student achievement. However, this study did identify and negate influencing factors to overall teacher and student satisfaction. Based on the limited number of participants and the single source from which the participants were drawn, the results from this study cannot be generalized to a larger population.

Implications

The results from this study did not support a relationship between teacher or student satisfaction and student achievement. However, in this researcher’s opinion, the commonality between the weighted satisfaction averages among honors and regular
education level students and teachers may suggest that the culture of a school may be the key factor in satisfaction levels for teachers and students. Further research is needed to provide additional insight into this possibility, and also to determine if the overall performance of a school is related to the weighted satisfaction average of its teachers and students.

One interesting finding in the data from this study revealed that the more extracurricular activities a student was involved in the more likely they were to be enrolled in honors level classes. However, the data also showed that once the number of extracurricular activities a student was involved in surpassed three, student satisfaction began to decrease. These results seem to indicate that there may be a level of extracurricular participation in which a student may begin to feel overwhelmed, resulting in lower levels of satisfaction. Additional research that includes a wider and more diverse population is needed to determine the validity of these finding.

**Recommendations**

In order to validate the findings of this study, further research that includes a wider and more diverse population should be conducted on this topic. Additional studies would establish a larger research base in the area of influences of teacher and student satisfaction while also removing the threats to the studies’ external validity. Additional studies should include varying schools with regard to size, socioeconomic, race, and academic achievement levels. This would allow a comparison between larger subgroups that have different achievement levels, and are more representative of students nationwide.

Future studies could also utilize more metrics for determining teacher and student satisfaction. Student achievement could also be defined using the scale scores from EOC
examinations instead of the 4-point composite score. This would increase the variability of the dependent variables and increase research validity. Future studies could also utilize chi squared in order to add more depth and clarity to the statistical analysis.
References


Willis, J (2010). *Learning to love math: Teaching strategies that change student attitudes and get results.* Alexandria, VA: ASCD.


Appendix A

Student Letter of Participation
Dear Parent/Guardian

There will be a student satisfaction survey distributed to selected classrooms at Bartlett Yancey High School. Your student may be in one of these classrooms and be asked to participate in this survey. The results of the survey will be completely anonymous and will be used to examine the relationship between student satisfaction and achievement. The results of this study may also help the staff at Bartlett Yancey to better serve its students in the future.

In approximately two weeks a letter will be sent home with your student for you to sign giving permission for them to participate in this survey. It is very important for the results of this survey to have as much participation as possible. If you have any questions regarding this survey and or research please do not hesitate to contact the school at 336-694-4212.

Sincerely,

Sean McWherter
Assistant Principal
Appendix B

Parent Consent Form
Dear Parent/Guardian

There will be a student satisfaction survey distributed to selected classrooms at Bartlett Yancey High School. Students will be asked to respond to 18 multiple-choice items and the expected completion time is no more than 20 minutes. The results of the survey will be anonymous and will be used in research that could potentially improve student experiences at Bartlett Yancey High School.

If you permit your child to participate in this survey please write your child’s name in the space provided and sign your name in the place provided for parent/guardian. Your child may return this form to the main office or to their 1st period teacher. Thank you for your consideration to this matter.

_________________________
Student Name

_________________________
Parent/Guardian Signature
Appendix C

Teacher Letter of Participation
Dear Teacher,

There will be a teacher satisfaction survey distributed to all teachers at the next faculty meeting. Before participating in the survey you will be asked to sign a consent form. The results of the survey will be completely anonymous. The results of the survey will be used to examine the relationship between teacher satisfaction and student achievement. The results of this study may be useful in helping to improve teacher satisfaction in the future.

The week after teacher satisfaction surveys have been completed various classrooms will be selected to administer a student satisfaction survey. This should only take about 20 minutes of class time at the beginning of the period. If your class is selected you will be notified a day prior to the survey administration so that you can make the necessary adjustments to your lesson plans.

If you have any questions regarding these surveys and or research you may direct them to the Principal Investigator at the start of or end of the next faculty meeting.

Sincerely,

Sean McWherter
Assistant Principal
Appendix D

Teacher Consent Form
To Whom it May Concern:

If you are receiving this letter it is assumed that you are a full time teacher employed at Bartlett Yancey High School. If you are not a full time teacher at Bartlett Yancey High School please disregard this letter.

You are being asked to participate in a teacher satisfaction survey. You will be asked to respond to 23 multiple-choice items and the expected completion time is no more than 25 minutes. The results of the survey will be anonymous and will be used in research that could potentially improve teacher experiences at Bartlett Yancey High School.

If you are willing to participate in this survey please sign your name in the space provided. Thank you for your time.

__________________________
Name
Appendix E

Teacher Survey
Directions: You are being asked to complete this survey about your experiences at your school this school year. Please read each item carefully and respond to each item by circling the appropriate response(s) based on your experiences.

There is no right or wrong answers and your responses will be confidential. Your individual responses will not be reported to any school or district level authority.

1.) What category best identifies your age?
   a.) 21-30
   b.) 31-40
   c.) 41-50
   c.) 51 or older

2.) Please identify your gender
   a.) male
   b.) female

3.) What category best identifies your years of experience in education?
   a.) 1-5
   b.) 6-15
   c.) 16-25
   d.) 26 or over

4.) What category best identifies your time spent at this school?
   a.) 1-5
   b.) 6-15
   c.) 16-25
   d.) 26 or over

5.) Have you received tenure?
   a.) Yes
   b.) No

6.) My certification is ____ (Circle all that apply)
   a.) Lateral entry
   b.) National Board certified
   c.) NC State Certified

7.) My highest level of formal education is
   a.) Bachelors degree
   b.) Masters degree
   c.) 6 year Advanced or Specialist degree
   d.) Doctorate
8.) Please indicate which of the following courses you taught this year (circle all that apply).
   a.) Honors
   b.) AP
   c.) EC
   d.) Regular ed.

<table>
<thead>
<tr>
<th>Please indicate your level of agreement with the following statements for this school year by filling in the appropriate circle choice.</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Sometimes agree/disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
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<tr>
<td>I feel a strong sense of job security at my current school</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>The Principal is the sole decision maker at my school</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>When making decisions the principal often asks for teacher feedback, but the final decision is made by the principal.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>The Principal discusses problems or issues with teachers and jointly make the decision on what to do</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>The Principal delegates specific groups or committees to make decisions</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
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Please indicate your level of agreement with the following statements for this school year by filling in the appropriate circle choice.

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<tr>
<th>Statement</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Sometimes agree/disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
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<tbody>
<tr>
<td>I am often recognized for my accomplishments</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>I receive feedback to help me improve my teaching</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>The school leadership consistently supports me as a teacher</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Teachers offer and give support to one another freely</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>The school leadership cares about me as a person</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>I feel a sense of belonging at my school</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
</tbody>
</table>
Please indicate your level of agreement with the following statements for this school year by filling in the appropriate circle choice.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Sometimes agree/disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>I am aware of the expectations placed on me for both instructional and non-instructional duties.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>I am protected from duties that interfere with my essential role of educating students</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>An appropriate amount of time is provided for professional development</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>The professional development I receive enhances my abilities to improve student learning</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>I believe that I have the knowledge necessary to implement best and diverse teaching practices in order to help my students attain high achievement levels.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Overall, my school is a good place to work and learn</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
</tbody>
</table>
Appendix F

Student Survey
Directions: You are being asked to complete this survey about your experiences at your school this school year. Please read each item carefully and respond to each item by circling the appropriate response(s) based on your experiences.

There is no right or wrong answers and your responses will be confidential. Your individual responses will not be reported to any school or district level authority.

1.) What grade are you in
   a.) 9th
   b.) 10th
   c.) 11th
   d.) 12th

2.) How old are you
   a.) 14
   b.) 15
   c.) 16
   d.) 17
   e.) 18
   f.) over 18

3.) Please identify your gender
   a.) male
   b.) female

4.) Have you been enrolled in any Honors level courses this school year?
   a.) yes
   b.) no

5.) I regularly participate in ______ club(s) or athletic team(s) each year.
   a.) 0
   b.) 1
   c.) 2
   d.) 3
   e.) 4
   f.) over 4

6.) On average my teachers give ______ homework assignments per week.
   a.) 0
   b.) 1
   c.) 2
   d.) 3
   e.) 4
   f.) 5
7.) The grades I make in school are mostly
   a.) A’s
   b.) B’s
   c.) C’s
   d.) D’s
   e.) F’s

8.) Have you ever been bullied at this school?
   a.) never
   b.) sometimes
   c.) often
   d.) almost daily

9.) If you have been bullied which of the following apply (circle all that apply)
   a.) verbal threats
   b.) physical assault
   c.) electronic (text messages or Facebook)
   d.) made fun of
   e.) I have never been bullied
Please indicate your level of agreement with the following statements for this school year by filling in the appropriate circle choice.

<table>
<thead>
<tr>
<th></th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Sometimes agree/disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>I feel safe at school when I am in supervised locations such as classrooms</td>
<td>○ ○ ○ ○ ○</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I feel safe at school when I am in less supervised locations such as hallways, the cafeteria, and bathrooms</td>
<td>○ ○ ○ ○</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>My teachers care about me as a person</td>
<td>○ ○ ○ ○ ○</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>My teachers are friendly</td>
<td>○ ○ ○ ○ ○</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>My teachers actively try and help me succeed in school</td>
<td>○ ○ ○ ○ ○</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>My teachers treat students fairly</td>
<td>○ ○ ○ ○ ○</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Please indicate your level of agreement with the following statements for this school year by filling in the appropriate circle choice.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Sometimes agree/disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>I feel as though I am successful in school</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>The homework assignments my teachers assign are relevant to what we are doing in class</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>My teachers always give me timely feedback on assignments either in the form of a grade, written comment or verbal response.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>My teachers respect me as a person</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>In general, I enjoy going to my school</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
</tbody>
</table>