

THE EFFECTS OF ACADEMIC OPTIMISM ON STUDENT
ACADEMIC ACHIEVEMENT IN ALABAMA

by

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A DISSERTATION

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ABSTRACT

The purpose of the research was to determine the effects of academic optimism on student academic achievement through measuring the individual and collective effects of academic emphasis, collective efficacy, and faculty trust in clients. Data for this study were obtained from the School Academic Optimism Scale and the reading section of the Alabama Reading and Mathematics Test (ARMT) given to fifth grade students in the spring of 2008.

The research designed included a correlation analysis using school scores on the School Academic Optimism Scale (SAOS) and fifth grade ARMT scores in reading. Descriptive statistics were calculated to describe the sample of 29 schools. A correlation analysis was run using the School Academic Optimism Scale (SAOS), Hoy, Hoy, and Tarter, 2006. Control variables included whether schools are rural or urban (this variable was later deleted since only three schools were designated as rural), student to teacher ratio, and student socioeconomic status determined by the percent of free and reduced lunch students at each school. The independent variables were academic emphasis, collective efficacy, and teacher trust of clients and collectively, academic optimism. The dependent variable of student achievement was measured by fifth grade reading scores on the ARMT for each school. Further analysis included two hierarchical multiple regressions. The analysis included Level I Bivariate correlations of all variables and Level II regression to test the effect of the independent variables on the dependent variable. The first step-wise regression was run using the control variables, (SES (F/R%) and student/teacher ratio (STR), in step one and the academic optimism variable in step two. The second step-wise regression reflected the three independent variables (academic emphasis (AE),

collective efficacy (CE), and faculty trust in clients (FT)), in step two. Finally, reliability was assessed by determining the Cronbach's alpha.

The findings in this study confirmed that there is a positive correlation between academic optimism and student achievement as measured by 5th grade reading scores on the Alabama Reading and Mathematics Test. Further, the data demonstrated the independent contribution that academic emphasis, collective efficacy, and faculty trust make on student achievement. There was a positive triadic relationship between all academic optimism variables and student achievement. Collectively, all variables were strong predictors of reading scores on the ARMT.

This study adds to the existing body of knowledge about academic optimism and reading achievement for elementary, middle, and high schools. This knowledge benefits individual schools and school systems as they prepare school improvement plans required by NCLB legislation and in particular the accountability measures required by the Alabama State Department of Education. In addition this research provides information to guide professional development necessary to implement strategies outlined in school improvement plans.

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CHAPTER 1

INTRODUCTION TO THE STUDY

I think the most important thing of all for any team is a winning attitude. The coaches must have it. The players must have it. The student body must have it. If you have dedicated players who believe in themselves, you don't need a lot of talent.
(Coach Paul "Bear" Bryant, <http://www.coachlikeapro.com/coach-paul-bear-bryant.html>)

Background

The keys to student academic success have been the center of research at least since the time of the Coleman Report in 1966 and today they have a resounding impact on school accountability. Coleman hypothesized that family background not school characteristics was the determining factor in student academic success. (Coleman, 1966) Since that report educational researchers have disputed Coleman's claim and searched for school level characteristics that impact student academic success regardless of family background.

According to Hoy, Hoy, and Tarter (2006), the 1979 work of Edmonds on effective schools presented five characteristics of a school that impacted student achievement: (1) strong principal leadership, (2) high expectations, (3) an emphasis on basic skills, (4) an orderly environment, and (5) frequent and systematic student assessment (p. 425). Hoy et al. (2006) found that taking into consideration the socioeconomic factors of a student there were other school-level characteristics that impacted student achievement. Collectively, they called these characteristics academic optimism, which they defined as a combination of school level characteristics of academic emphasis, collective efficacy, and faculty trust in clients (p. 431). Further, they labeled academic emphasis as the degree to which a school focuses on academic

achievement (p. 427), and collective efficacy as the belief that the school as a whole can obtain high goals accordingly. To them, collective efficacy is built upon the efficacy of the students and on the individual teacher efficacy (p. 428). Faculty trust includes a faculty's trust in the students, parents and each other (p. 429). The construct of academic optimism allows educators to view schools through the lens of possibilities; how students can be academically successful despite socioeconomic factors.

Currently schools are faced with challenges presented by the *No Child Left Behind Act 2002* (No Child Left Behind, 2002) legislation to ensure all students are proficient by 2014. Accountability measures according to NCLB education reform legislation have forced schools to examine how students learn and how to help all students' in grades three through eight, and grade eleven, master proficiency levels specifically in the areas of reading and mathematics. In grade eleven additional requirements in the areas of language, social studies and science (biology as of 2009) are added to the graduation exam. Additional requirements ensure that 95% of all students in grades three through eight are tested and that 90% of high school students pass all portions of the graduation exam (Alabama State, 2005). Annually, results from each states' criterion referenced standardized tests are compared to those of the National Association of Education Progress (NAEP) which are given to a random sampling of students in each state in grades four and eight ("The New Rules," 2002).

Connecting previous research from Coleman (1966) to effective school research (Edmonds, 1979; Lezotte, 1970), and studies on academic optimism (Bandura, 1993; Hoy & McGuigan, 2006; Hoy, Kottkamp, & Tarter, 1991), this research will focus specifically on the effects of academic optimism on student academic achievement and how that impacts accountability through fifth grade reading scores on the Alabama Reading and Mathematics Test

(ARMT) administered in the spring 2008. NCLB mandates and the individual school level characteristics of academic emphasis, collective efficacy, and teacher trust in clients were examined to determine the collective effects of academic optimism on student academic achievement.

Statement of the Problem

Schools today are faced with a mandate to make Adequate Yearly Progress (AYP) in order to comply with the No Child Left Behind Legislation, 2002 (NCLB). AYP is the level of achievement toward 100% proficiency of all students mandated by 2014. Accountability is measured in elementary schools based on a 95% test participation rate of students in grades three through eight, participating in state testing and student performance measured in four levels, in the areas of mathematics and reading on these tests. Performance is measured using Annual Measurable Academic Objectives (AMAO), which rise steadily to reach 100% by the year 2014 (see Table 1).

Table 1

Annual Measurable Academic Objectives Grade 5 Students are Required to Reach by 2014 in Reading

2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
73	73	77	77	81	85	88	92	96	100

Effective schools research was a response to the work of Coleman (1966). For more than 30 years, educational research on effective schools has focused on what should be taught in schools, how it should be taught, and how to determine whether student achievement is to be

improved. According to Cotton (1995), effective schools research is based on how the curriculum is taught in comparison to how it is assessed. How classrooms and schools are organized and managed and how the community is involved and supports the educational process (pp. 4-6). The Center for the Improvement of Early Reading Achievement (CIERA) School Change Project applied effective schools research to reading reform. In a synthesis of effective schools research, Pearson, Peterson, Rodriguez, and Taylor (2002) found several themes pervasive throughout the last 30 years. They found that when teachers are explicitly trained and their work is focused on specific student achievement goals established by the school as a whole with the support of leadership using frequent monitoring of progress and community support, that student achievement in the area of reading was improved (p. 2).

According to Hoy et al. (2006), a latent construct known as academic optimism is the combination of academic emphasis, collective efficacy, and faculty trust in clients. Hoy and his colleagues examined school traits which impact student achievement and the reciprocal effect of academic emphasis, collective efficacy, and faculty trust in clients to create an environment which promotes student achievement. According to Hoy et al. (2006), academic optimism also called academic press, sets a tone for the school. They argued that the goals of the school become the climate of the school. Research by Goddard et al. (2000), as noted by Hoy and his colleagues, applied this same model to elementary schools and showed a positive correlation to both reading and math scores, especially for poor students (p. 427). Additionally, Hoy and McGuigan (2006) argued that as schools define their goals and expectations, then academic success was a natural result.

With the increased demands placed on schools to provide high levels of educational rigor and expectations for all learners, it seems essential to determine the effects of academic

optimism on student academic achievement. This research will focus specifically on the effects of academic optimism by examining relationships among the school level characteristics of academic emphasis, collective efficacy and trust as each explicitly relates to student academic achievement.

Purpose of the Study

The purpose of this study was to examine the effects of academic optimism on student academic achievement. Academic optimism (Hoy et al., 2006) is a construct comprised of academic emphasis, collective efficacy, and faculty trust in clients. The effects of each component of the construct were examined. The researcher hoped that this study will add to the existing body of knowledge in the area of academic optimism for elementary, middle, and high schools and that it will assist individual schools and school systems in their efforts to improve student learning. Educators have believed that since the arrival of NCLB legislation, which increased emphasis on standards-based testing, it has been essential to determine academic practices that lead to the success of all students. In addition, according to McGranahan (1994), the economy today requires schools to prepare students for success in a global labor market. The researcher hoped that this study will provide data that will enable schools to make more informed decisions when developing school system staff development programs and as school systems and individual schools develop continuous improvement plans. According to Edmonds (1979), and Lezotte (1970), research-based practices are vital to establishing partnerships among principals, teachers, students, and the community to assist poor performing schools in their efforts to improve.

Research Questions and Design

The purpose of this study was to determine the effects of academic optimism on student achievement, including the school level characteristics of academic emphasis, collective efficacy, and faculty trust in clients. The following research questions were addressed: Is there a positive correlation between academic optimism and student achievement as measured by fifth grade ARMT reading scores? What is the independent contribution that academic emphasis, collective efficacy, and faculty trust of clients make on student achievement?

A correlation analysis was run using the School Academic Optimism Scale (SAOS). Control variables included whether schools are rural or urban (this variable was later deleted since only three schools were designated as rural), student to teacher ratio and student socioeconomic status determined by the percent of free and reduced lunch students at each school. The independent variables were academic emphasis, collective efficacy, and teacher trust of clients and collectively academic optimism. The dependent variable of student achievement was measured by fifth grade reading scores on the ARMT for each school.

Definitions of Key Terms

Academic emphasis: This is a quest for academic excellence which includes high goals, an orderly achievement environment, motivated students, and an appreciation for student achievement.

Academic optimism: A combination of academic emphasis, collective efficacy, and faculty trust in clients.

Academic press: This is a term that refers to the degree to which the school pursues academic excellence.

Adequate Yearly Progress: This denotes progress made over a year to meet annual academic goals. AYP is reported in the areas of math, reading, attendance, and graduation rate.

Annual Measurable Academic Objectives: This is the established yearly target for the percentage of students scoring at levels III and IV on the ARMT

Closed climate: This describes schools in which principals do not want or expect teacher input, who establish many rules for teachers, and who do not take a personal interest in teachers (also known as unhealthy climate).

Collective efficacy: This is a belief among faculty members that the school as a whole can achieve stated goals to insure student achievement.

Culture of trust: An organizational ethic that is comprised of collegial professional relations and trust in both one's colleagues and superiors.

Ethical leadership: A feeling of duty and personal responsibility present in leadership.

Faculty trust in clients: A trust in students and their parents by teachers and administrators is present.

Moral leadership: This leadership demonstrates one's virtue or moral character.

Open climate: Schools have principals who invite teacher input, set clear expectations and set high standards (also known as healthy climate).

Organizational climate: This is a teacher's perception of a school's work environment as affected by formal and informal organization and politics.

Professional achievement community: The administration and faculty work together to expect and achieve high levels of student achievement.

Relational trust: This type of trust is found in everyday relationships that binds people to the school and to each other.

Social capital: This resource provides a sense of stability and support for students.

Value-added assessment: This term denotes an assessment to determine the effectiveness of teachers based on how much student's progress in a year.

Limitations of the Study

This study was limited to elementary schools in North Alabama in four school districts. Only schools with a kindergarten through fifth or sixth grade configuration were included. Data collection was restricted to the School Academic Optimism Scale and reading scores from the 2008 ARMT administered to fifth grade students. Other assessments of student learning may yield different results.

Summary

This research focused specifically on the effects of academic optimism on student academic achievement. School level characteristics of academic emphasis, collective efficacy, and faculty trust in clients as each explicitly relates to student academic achievement were examined. Previous research on student academic achievement from Coleman (1966) to Hoy et al. (2006) was described. An explanation of NCLB mandates as they apply to schools and their improvement plans and proficiency was explained as well as the benefits schools can gain from this study. Finally, the chapter provided an explanation of the research design and research questions.

For the purpose of this study a comprehensive review of the literature was conducted. Information reviewed for chapter 2 pertained to school reforms mandated by NCLB, academic optimism, the school level characteristics of academic emphasis, collective efficacy, faculty trust

in clients, and the impact each has on student achievement. Chapter 3 describes the methodology used including the survey instrument, data collection and analysis, and participants. Chapter 4 presents the findings of the research. Finally, chapter 5 contains a summary of the findings, conclusions and recommendations drawn from the research.

CHAPTER 2

REVIEW OF RELATED LITERATURE

Introduction

As schools are faced with more public accountability for student academic performance, school level characteristics are being studied to discover methods of improving achievement for all students. Considerable research has been conducted on teaching skills, climate, socioeconomic conditions, and student achievement (Coleman et al., 1966; Hoy, 1985; Hoy, Kottkamp, & Tarter, 1991; Rafferty, 2003). Less research has been conducted about the relationship of academic optimism to student academic achievement. In this chapter a review of the research is presented on the construct of academic optimism, which includes the school level characteristics of academic emphasis, collective efficacy, and faculty trust of clients as they impact student achievement. Chapter 2 is divided into five sections: (1) NCLB requirements, (2) academic optimism, (3) collective efficacy, (4) trust of clients, and (5) student academic achievement. The first section offers both the definition and requirements of No Child Left Behind legislation. Each following section offers a description, a review of the relevant literature, and a review of previous research relevant to this study.

No Child Left Behind

Immediately after taking office in 2001, President George W. Bush introduced educational reform known as *No Child Left Behind* (NCLB), which he signed into law in January of 2002. This legislation reauthorized the Elementary and Secondary Education Act (ESEA) of

1965, signed into law by then President, Lyndon B. Johnson (U.S. Government, 2002). Through this reauthorization, the federal government increased its engagement in education by holding school systems and individual schools accountable for student academic performance. NCLB required states to develop standardized tests in reading and mathematics for all students in Grades 3 through 8, plus graduation requirements, and established annual proficiency standards. In Alabama, the Alabama High School Graduation Exam (AHSGE) was added. High school students must pass all five portions of the exam with accountability measured by the 11th grade class. These standards were later titled adequately yearly progress (AYP). Along with the progress assessments, penalties were prescribed for schools that did not meet the proficiency standards. The first level of penalties for not meeting AYP includes writing a Continuous Improvement Plan (CIP).

The data driven CIP provides a map for schools to follow for one year in order to meet AYP the following school year. In Alabama, each school completes a CIP even if the school made AYP. The improvement plans include identifying three goals and benchmarks toward achieving those goals, the implementation of research-based strategies for classroom teachers, resources needed to realize the goals, timelines for completion, professional development needed, and monitoring dates of the plan (Alabama State, 2005)

Standardized academic assessments for Alabama include the ARMT for Grades 3 through 8; the Alabama High School Graduation Exam (AHSGE) for 11th grade students in the areas of reading, mathematics, social studies, science, and language (only reading and mathematics calculate in accountability); and the Alabama Alternative Assessment using the extended standards for Grades 3 through 8 and Grade 11. Additionally, the Alabama Science Assessment for Grades 5 and 7 and the biology area subject test (to replace the science portion of

the AHSGE) were added in 2009 but do not factor in determining accountability. All tests data are reported in terms of “all students” and in the disaggregated categories of free and reduced meals, ethnicity, special education, and limited English language proficiency.

Additional Academic Indicators (AAI) for schools includes test attendance and graduation rates. Elementary and middle schools must test a minimum of 95% of their students. High schools must have a graduation rate of 90%. Schools that do not meet AYP due to deficient scores in reading or mathematics or do not have the specified testing attendance or progress toward a 90% graduation rate are required to complete Continuous Improvement Plans (CIP) that must be approved by the State Department of Education. All schools in Alabama complete the CIP but only those schools who do not meet AYP for two consecutive years in the same category must go through a state approval requirement. Schools are notified of their academic status in August of each year (Alabama State, 2008).

Academic Optimism

Research on school level characteristics that impact student academic achievement, while controlling for socioeconomic factors, was the focal point of studies by Hoy, Hoy and Tarter (2006). The researchers proposed a new construct, “academic optimism.” They defined academic optimism as the combination of academic emphasis, collective efficacy, and faculty trust in clients (p. 426). Academic emphasis was defined as the degree to which faculty members and school leaders strive for academic excellence. Specifically related to elementary schools, a strong academic emphasis led to higher scores in reading and math (p. 427). A second factor defined by Hoy et al. (2006), is collective efficacy; they defined it as the belief among faculty members that the school as a whole can achieve stated goals to insure student academic achievement. They

reasoned that collective efficacy tends to push teachers to work harder and to keep a positive attitude when striving for higher student academic success. Collective efficacy of a faculty is built upon the individual self-efficacy of teachers. When teachers feel confident as individuals then collectively about school accomplishments, they have more faith in the abilities of each other and of their students (p. 428). Finally, the authors defined faculty trust in clients as the interweaving of “benevolence, reliability, competence, honesty, and openness” (p. 429). Hoy and his colleagues argued that all five factors combined would create expectations of trust and commitment, and hence affect student academic success.

Research by Hoy et al. (2006) found that the constructs of academic emphasis, collective efficacy, and faculty trust in both parents and students was reliable in predicting student academic success. According to Coleman (1966), schools had little to do with the success of the students. Instead, the students’ socioeconomic situation was the determining factor in their success. Hoy et al. (2006) argued that even though socioeconomic factors do play a part in student achievement, academic optimism was a stronger predictor of student achievement at all levels: elementary, middle, and high school. Academic optimism can be achieved through clearly defined and reachable goals, and an environment conducive to achievement in terms of discipline, distractions, and motivation. Academic optimism includes an element of respect on the part of the students. Using controlling variables such as socioeconomic status, previous achievement, and urbanicity, the construct of academic optimism, and the school level characteristics of academic emphasis, collective efficacy, and faculty trust were applied to group perceptions as emergent organizational attributes (p. 430). The researchers argued that the three themes created group norms. Therefore, when members of the group do not comply with the norms, they face sanctions from other members. Thus academic optimism defined the teachers

and principal as a group who are expected to have the same work ethic, same sense of dedication, and same achievement goals for the students. Additional research by Hoy and McGuigan (2006) predicted academic optimism would be a significant contributor to academic achievement.

Academic Emphasis

Academic emphasis was found to be a key link between organizational health and an “environmental robustness” (p. 468) in research by Harper and Licata (1999), who hypothesized that healthy schools are those in which there is a high level of academic emphasis. Healthy schools were schools in which teachers maintain high expectations for their students and these expectations are supported by the parents and the students. Using the Organizational Health Index (OHI) (Hoy et al., 1991), their research included 45 middle schools with urban, suburban, small city, and rural settings. How academic emphasis impacted elementary scores in both reading and mathematics was the focus of research by Goddard, Hoy, and Sweetland (2000). With the increased weight of standardized tests on schools, the researchers found it appropriate to determine school level characteristics that facilitated student academic achievement. Based on earlier research by Hoy, Tarter, and Kottkamp (1991) and Hoy and Tarter (1997) the purpose of the Goddard et al. (2000) research was to provide evidence that academic emphasis is related to student achievement (p. 684). In addition, the previous research viewed academic emphasis as behavioral and normative aspects of the school environment (p. 686). Goddard et al. took this one step further by arguing that academic emphasis is a social perception that supports teaching and thereby student achievement. They hypothesized that academic emphasis was cyclical in nature. As academic emphasis created a positive organizational climate, student academic

achievement improved. As student academic achievement improved, the organizational climate improved. Research findings supported the claim that both reading and mathematics in the elementary setting are improved with academic emphasis because both teachers and students expect and receive encouragement through student academic success. Academic emphasis was defined by Hoy et al. (2006) as the quest for academic excellence, which includes high goals, an orderly environment, motivated students, and an appreciation for student academic achievement. They argued that this “drive for excellence’ created a climate that was structured and encouraged trust among the faculty to set high, achievable goals in high schools and middle schools.

Bevans, Bradshaw, Leaf ,and Meich (2007) argued that the degree of academic emphasis of a school was a predictor of organizational health of a school. Using the Organizational Health Inventory (OHI), they studied 37 elementary schools. They theorized that school climate impacted staff behavior which impacted student academic performance. Their results confirmed that two factors that affect academic optimism for teachers are faculty turnover rate and student mobility (p. 297). Instability may cause teachers to be more concerned with classroom discipline and maintaining order than academics. However, they did determine that school level characteristics such as academic optimism were essential in developing improvement plans for schools.

Hoy and Smith (2007), in another study the same year, collected data from 99 schools in Texas. They found that academic emphasis had a significant positive relationship to student achievement. The authors cited several previous works on the impact of academic emphasis while controlling for socioeconomic factors (Goddard et al., 2000; Hoy et al., 1991; Hoy & Sabo, 1998). They also cited a study by Alig-Mielcarek and Hoy (2005), which compared the impact of instructional leadership and academic emphasis. Their findings showed academic emphasis was

a strong predictor of student achievement while instructional leadership had only an indirect influence.

Collective Efficacy

Influential to the research on collective efficacy was the early research in the area of social cognitive theory. Bandura (1969) proposed that the socialization process involved patterns and traditions which shape educational decisions. In short, individuals learn to exhibit the appropriate behavior for the situation (p. 213). Applying this to individual and collective efficacy, responses can be reinforced. If students feel academically successful they will continue to act in the same academic manner or pattern. Subsequently, teachers will be driven by the student academic success to continue in the same pattern of academic expectations. Continuing in this line, Bandura (1977) explained how expectations of personal self-efficacy could be initiated and maintained within individuals (p. 191). He proposed that individuals were constantly engaged in observational learning. Individuals learn to develop behaviors that deliver the responses they desire, thus personal efficacy is developed. As individuals develop higher levels of self-efficacy they are more likely to tackle more difficult situations (p. 193).

Adding to this reasoning, Bandura (1993) studied the impact of perceived self-efficacy on cognitive development and functioning on student beliefs and teacher beliefs. Bandura reasserted his 1991 claim that individuals set goals depending upon their sense of self-efficacy. The higher the self-efficacy the higher the goals they will set (p. 118). Further, self-efficacy can be a stronger predictor of performance than actual skill applied to all three levels. A strong sense of self-efficacy enables one to use skills more effectively (p. 119). As an example, Bandura proposed that the way in which teachers receive feedback on their performance impacts their

sense of self-efficacy which impacts collective efficacy. He argued that positive feedback focused on improvement builds self-efficacy just as negative feedback focused on shortfalls may actually undermine future improvement (p. 125).

One focus of educational research over the last couple of decades has been to determine factors that create a school climate conducive to academic achievement. Hoy, Kottkamp, and Tarter (1991) cited Edmonds's (1979) research on effective schools. Edmonds defined climate as an environment that promotes student academic achievement (p. 2). To determine the climate or "personality" of schools, Hoy et al. (1991) began with the Organizational Climate Description Questionnaire (OCDQ) developed by Croft and Halpin between 1962 and 1963. The OCDQ was designed to determine the climate of an elementary school. Specifically, it identified what the developers termed the "critical aspects of teacher-teacher and teacher-principal interactions" (p. 10). The original survey was composed of 64 Likert-type questions measuring eight dimensions of school climate: (1) disengagement, (2) hindrance, (3) esprit, (4) intimacy, behavior of the leader, (5) aloofness, (6) production emphasis, (7) thrust, and (8) consideration (p. 11). Hoy and Miskel (2005) elaborated on the extension of this survey to middle and high schools. In order to determine whether a school climate was open or closed, the Organizational Climate Description Questionnaire-Revised (OCDQ-RE) was developed. It was based on the following six dimensions: (1) Supportive Principal Behavior, (2) Directive Principal Behavior, (3) Restrictive Principal Behavior, (4) Collegial Teacher Behavior, (5) Intimate Teacher Behavior, and (6) Disengaged Teacher Behavior (p. 187). An open school climate engaged faculty members in decision making, encouraged respect for all stakeholders, and developed creative ideas through communication and support. A closed school climate lacked inspiration, the exchange of ideas, and a creative spirit (p. 187).

Hoy, Kottkamp, and Tarter (1990) found the organizational commitment of teachers determined their attitudes concerning school issues. They defined organizational commitment as “one’s identification and commitment with an organization” (p. 236). In their study, they viewed commitment through the lens of attitude. Four basic problems identified as essential to address in order to promote school success were (1) acquiring sufficient resources which were accommodating to their environments, (2) achieving goals, (3) maintaining internal solidarity, and (4) preserving a unique value system (p. 237). Hoy, Tarter, and Witkoskie (1992) asserted that the faculty and the school are one and the same. Supportive behavior on the part of the principal was reciprocal as it filtered down to supportive teacher behavior among colleagues. They argued that open and professional teacher collegiality promoted student achievement.

Later that same decade, Miles, according to Hoy et al. (1991), determined 10 dimensions of organizational health organized under the headings of task needs, maintenance needs, and growth and development needs (p. 22). According to Hoy et al., several attempts were made to utilize these dimensions and develop instruments to measure organizational health (Childers & Fainman, 1985; Clark & Fainman, 1983; Kimpston & Sonnabend, 1975). None of the attempts were successful. Feldman and Hoy (1987) reported that the list of dimensions was narrowed to seven in the development of the Organizational Health Inventory (OHI), which was created to measure school health. According to Lumpa, Whitaker, and Whitaker (2000), until the 1950s the term climate was not used to describe a school setting. Whitaker cited Sargeant, as cited in Norton (1984), who described school climate as the “personality sketch of the school” (p. 95).

An earlier study by Rafferty (2003) on open and closed climates noted the many expectations placed on teachers in schools today. School reform and requirements to improve standardized test scores add to the demands placed upon teachers. Teachers are expected to help

every child perform at his or her highest level. Rafferty noted that many times these expectations come without adequate resources to add programs or staff members. Schools are involved in continuous improvement plans yearly and seek new and improved ways to teach children. That pressure can have a negative effect on teachers (p. 49). Rafferty's study focused on one specific aspect, upward communication, between teachers and principals. Communication was defined as more than verbal messages; it is how people interact with each other on a daily basis (p. 50). Results indicated communication was at the core of creating an open climate and affected both teacher perceptions and behaviors.

Climate perspectives of open and healthy schools were further defined by Hoy (2003). Open schools were defined as those where teachers and principals are "straight" with each other (p. 38). Everyone is on the "same team." Healthy schools were defined based on the work of Miles (1969) as those that were strong through times of difficulty and growth. Principals were seen as positive leaders who have high expectations. Additionally, Hoy found that definitions of open and healthy climates merge in the following four areas: (1) environmental press--school and community relationships, (2) collegial leadership--openness of the principal, (3) teacher professionalism--collegiality, and (4) academic press--relationship between the school and its students (p. 39).

Hoy et al. (1991) used the terms healthy and unhealthy to describe school climate when they developed the OHI. According to them, healthy schools shield faculties from outside pressure from community members, parents, and even board members. The faculties have a desire to work together on goals determined as a group. Unhealthy schools lack direction, support at most levels, and operate day to day without specific, achievable goals (p. 16). The researchers of the OHI also developed the OHI-S for secondary schools and the OHI-E for

elementary schools. The researchers argued that benefits of using the OHI included understanding the perception teachers had of the principal and enabled principals to determine the health of their schools which directly affects student achievement (p. 204).

Research by Bussey and Everson (2007) focused on the moral aspect of leadership. The researchers used the construct social justice (p. 177) in referring to an approach to training and education of future school administrators. The authors asserted that is the responsibility of principals to factor equality and morality into decision making. In addition, Arredondo Rucinski and Bauch (2006) have argued that developing reflective, moral leaders is the current goal of most educational leadership preparation programs. The authors argued there is a need to prepare administrators to practice reflection and to practice ethical and moral leadership as they work with students who come from a variety of cultural and economic backgrounds. Reflection is needed in order to learn from one's experience. Ethical leadership and moral leadership are distinguished by definition. Ethical leadership is a feeling of duty and personal responsibility. Moral leadership falls in the realm of demonstrating one's virtue or moral character (Arredondo Rucinski & Bauch, 2006). Arredondo et al. (1995) presented dialogue as a tool for allowing one to understand the thinking behind the action, a tool for examining why an action was taken. They emphasized the need for a "democratic dialogue" among educators to begin the process of closing the achievement gap between Blacks and Whites (p. 487). A natural consequence of this is a greater emphasis on issues of social justice. Arredondo Rucinski and Bauch referred to social justice in terms of the issues administrators must face in order to successfully meet the needs of all students.

An earlier study by Goddard, Hoy, and Hoy (2000) found that positive collective teacher efficacy begins with individual teacher efficacy and positively affects student achievement. A

1998 study by Goddard et al. focused on four sources of efficacy: mastery of experience, physiological arousal, vicarious experience, and verbal persuasion (p. 482). This model, as cited by Hoy and Miskel (2005), illustrated the cyclical nature of teacher efficacy from the sources of efficacy (physiological clues, verbal persuasion, vicarious experience, mastery experience) to cognitive processing to both analysis of teaching the task and assessment of teaching competence to teacher efficacy to consequences of teacher efficacy (effort, persistence, success) to performance then back to sources of efficacy (p. 154).

Results of the Goddard et al. (2000) study were consistent with the researchers' initial hypothesis. When teachers are confident in their ability, first as individuals and then as a group to complete a task, student achievement is improved. Next, collective teacher efficacy made a difference in student achievement from school to school, and, finally, collective teacher efficacy led to a more purposeful response to student achievement needs (pp. 501-502).

According to a report by Bandura (1993), an important aspect of student achievement is self efficacy. Self-efficacy emerges from one's cognitive processes such as self-appraisal. If students believe they can accomplish a goal, they are more likely to be successful. Students with equal talent or knowledge will differ in success based on their self-efficacy. Accordingly, as students think through a problem or task, they predict events or situations and how to address each. Such students are then inwardly motivated to set goals and find solutions (p. 119).

Building on this idea, the effective schools research of Hoy, Smith, and Sweetland (2002) cited collective efficacy of the teachers as a key variable in student achievement. The premise of the research was that collective efficacy and the belief in the group to accomplish goals impacts student academic achievement at a greater level than student socioeconomic status. The particular focus of this study was on student achievement in mathematics. The study found that

schools with strong collective efficacy established social norms. Any teacher seen as not meeting the expectations of the group suffered social sanctions; as a result, teachers took on the responsibility of student academic success. The theoretical model established for the research followed the path from socioeconomic status and academic press, the “quest for academic excellence” (p. 79) to collective efficacy and student achievement. Results supported the hypothesis that students in schools with collective efficacy score higher on standardized mathematics tests. Collective efficacy was seen as vital in explaining student achievement, and that it had a reciprocal effect. As students performed well, the teachers became more determined and excited about academic press. Furthermore, parents and community members shared in the expectations, so school efforts were supported at home.

Sagor (2008) studied the effect of student optimism on student achievement. He cited real life experiences of students who were pressed to believe in themselves by adults. Sagor suggested there are two important building blocks required for student optimism: faith in the future and personal efficacy (p. 27). Students who have supportive adults in their lives can see beyond today into the promise of tomorrow. Students with a strong belief in their own abilities, dreams, and ideas have a better chance at success.

Faculty Trust in Clients

Trust as applied to schools is hard to define with specificity. Hoy and Tschannen-Moran (2000) reviewed literature on trust in schools. Although they discovered many definitions, seven similarities or facets emerged. They included the following: (1) vulnerability, (2) confidence, (3) benevolence, (4) reliability, (5) competence, (6) honesty, and (7) openness (pp. 557-558). The influence of each facet depends of the type of relationship.

According to Whitener et al. (1998), as cited by Hoy and Tschannen-Moran (2000), principals can cultivate trust by demonstrating the following five behaviors: (1) consistency, (2) integrity, (3) concern, (4) communication, and (5) sharing control (p. 571). Teachers can earn each others' trust in simple ways such as covering a class or in more heartfelt ways such as providing food for one another during an illness. This in turn creates a sense of trust which may lead to an increased collective efficacy among teachers.

Sergiovanni (2005) used the "trust first" idea, noting trust must come before goals, strategies, or plans. He questioned schools with poor performance scores on issues of ability and concern, and suggested that the schools and the faculty were not trusted. He argued that including teachers, community members, and students in decision making created relationships of trust that enabled schools to weather storms of any kind. Sergiovanni (2005) added that hope and faith combined with action allow others to see the possibilities. Stakeholders such as community members, school board members, teachers, and students have expectations of their schools, whether spoken or unspoken. According to Sergiovanni, two powerful forces acquired from working together are relational trust and social capital. Relational trust, the type of trust found in everyday relationships, binds people to the school and to each other. Social capital is support offered to all stakeholders of the school (p. 115).

Deal and Peterson (1999) identified the community as customers. According to them, in order for schools to expect or request resources from community members, they needed to build a bond of trust. Communities, seen as customers, view schools as resources, centers of pride, and places that hold fond memories.

Smith (2007) suggested adding trustworthiness as a component. Smith described trustworthiness as those who have earned one's trust. DiPaola and Hoy (2008) saw evidence of

trustworthiness in the conclusions drawn from observed behavior and argued that trustworthiness is directly correlated to the level of trust one has of another. They noted a 1985 study by Hoy and Kupersmith on teacher trust that measured (1) teacher trust of principal, (2) teacher trust of colleagues, and (3) teacher trust of school organization (p. 4). Their findings suggested that teacher levels of trust are dependent upon the perceived trustworthiness of each group.

Hoy and Tarter (1988) argued that trust is the cornerstone to professional relationships that promote student achievement; it permeates decision making, goal setting, and professional development and to them it is a priority. They argued that trust is the basis for effective relationships among colleagues; it is crucial to effective communication and teamwork. Taking their definition a step further, Hoy et al. (1992) described trust and expectations of teachers in terms of the reliability of others. Their 1992 study was based on five variables: (1) supportive leadership, (2) teacher collegiality, (3) faculty trust in colleagues, (4) faculty trust in principals, and (5) effectiveness (p. 38). They reported that the value of a team is vital to creating a “culture of trust.” A culture of trust is defined as “an organizational ethic that is comprised of collegial professional relations and trust in both one’s colleagues and superiors” (p. 39). In their study of 44 elementary schools in New Jersey, using the Organizational Climate Description Questionnaire-RE, Hoy et al. (1992) measured two aspects of trust, faculty trust in principals and faculty trust in colleagues. Results supported the idea that faculty trust in principals fostered trust in colleagues and overall effectiveness. An unexpected revelation was that faculty trust in the principal was not directly related to effectiveness in teaching (p. 42).

In a later study of 86 middle schools, by Hoy and Tschannen-Moran (1998), two elements of trust in schools were examined: trust in the principal and trust in colleagues. Their study concentrated on five elements of school climate that determined trust: (1) environmental

press, (2) collegiality, (3) professionalism, (4) academic press, and (5) authenticity (pp. 343-344). The authors defined environmental press as the pressure and influence exerted by parents and the community. Academic press was defined as the degree that the school strives for excellence in academics (p. 343). The definition for authenticity was based on the work of Henderson and Hoy (1983), which divided the definition into three parts: accountability, non-manipulation, and salience of self (p. 344). Results supported the idea that how teachers treat each other was positively linked to trust in colleagues (p. 350).

A similar study on organizational health of high schools concentrated on faculty trust (Hoy, Smith, & Sweetland, 2001), and hypothesized a reciprocal effect of healthy organizational climate and faculty trust (p. 138). Just as a healthy school climate facilitates faculty trust, an unhealthy school climate destroys or prevents faculty trust from growing. The researchers limited their study to high schools. Their research questions focused on the relationship between school health and faculty trust and more specifically, the predictors of organizational health as related to four aspects of faculty trust. The four aspects included the following: (1) trust in students, (2) trust in principal, (3) trust in colleagues, and (4) trust in parents (p. 137). Hoy and colleagues questioned whether the inclusive trust that elementary teachers place with students and parents would be the same or would teachers at the high school level separate the two groups. The results indicated that teacher morale was the greatest predictor of faculty trust in colleagues and that faculty trust in principals was highest in schools where the principal was supportive and was an active participant in the pursuit of school goals; and, finally, faculty trust of students and parents was the same at all levels. If teachers trusted the students to do their best, they also trusted the parents to support the work of the school.

A later study by Hoy (2003) in development of the Organizational Climate Index (OCI) for high schools, found trust to be a defining element of a healthy or open school. Trust helped create interpersonal relationships that generated communication and organizational strength. Trust was also a significant factor in the creation of relationships between teachers, between teachers and students, and between teachers and principals.

Hoy, Hoy, and Tarter (2006) found the key to student achievement was relational trust. Trust allows for experimentation and for taking risks, and it is a factor in faculty attendance. Relational trust was the focal point of a dissertation by Vodicka (2007) who found that trust between teachers and their principals was important for schools to improve. Professional dialogue and collegiality directed toward school achievement apparently develops a social network, providing a sense of trust and professionalism. Also, social networks determine the “patterns of relationships” (p. 1) that emerge among school faculty members and their principals. Relational trust is extended to the community in terms of perception or how the community members view their relationship with the school.

According to several researchers (Hoy & McGuigan, 2006; Hoy & Tschannen-Moran, 1998; Karney, 2007) teachers’ trust in each other and in students translates to a positive school climate. Berebitsky, Goddard, and Salloum (2009) validated the impact of trust on student achievement. Their study emphasized the interpersonal relationships found in a school setting and how these relate to student achievement. They found that faculties with a high level of trust used any resources they had more efficiently, they felt more of a personal and professional investment in the school, and they felt a responsibility for student achievement. Research specifically pertaining to the nature, meaning, and measurement of trust in schools by Hoy and Tschannen-Moran (2000) found that trust is an essential element in education since the learner

must trust those providing instruction. Trust is an interdependent component of relationships between students and teachers, teachers and teachers, teachers and principals, and teachers and parents that may not be realized unless that trust is broken. It allows for efficient operation of the school as an organization and builds a foundation for developing effective schools (p. 549).

Social capital as used by Coleman (1988) is a resource to provide a sense of stability and support for students (p. 8). Coleman, who conducted research on the difference between the difficulty of courses taken by students at Catholic schools, private schools, and public schools for *Momentum*, concluded that high school students who lack adult support are more likely to take easier courses and to drop out of school. Relational trust or, trust placed on the adults who surround students and provide social capital, go hand in hand to promote trust in the principal and to promote student learning (p. 8). Coleman found that social capital provided by the church, faculty, and family combined to encourage students to take more challenging courses and to stay in school (p. 9).

In order to measure organizational trust, Hoy and Tschannen-Moran (1999) determined five key facets: (1) benevolence, (2) reliability, (3) competence, (4) honesty, and (5) openness. These were examined during the development of the Trust Scale (T-Scale; Hoy, 2005). Results of the research enabled Hoy et al. (1999) to develop not only the Trust Scale but a constitutive definition of trust as “an individual’s or group’s willingness to be vulnerable to another party based on confidence that the latter party is benevolent, reliable, competent, honest, and open” (p. 204).

Student Achievement

Historical evidence examined through the context of mass education pointed to a failure in the original thinking and establishment of education for all, according to Stone (2003). He found that as large numbers of students with poor abilities arrived at schools, the expectations were set at a low level. He cited the work of Leacock (1969) and of Silberman (1970) who found that low expectations at school combined with low expectations at home perpetuated low student achievement. Teachers in schools in low income neighborhoods were less likely to press students to achieve at high levels and were not a positive influence to the students (p. 2). Stone noted a 1960 report by the Harlem Youth Opportunities Unlimited, which found that teachers who set their expectations of students based on the students' background were actually creating "a permanent barrier to achievement" (p. 2). Prior work by McGranahan (1994) found a trend in education, particularly in rural areas, to focus education toward trade occupations. Additionally, the percentage of young men from rural communities completing a college education dropped from 19% to 13% (p. 141).

Why some schools are successful in educating all students and some are not was the focus of a series of studies by Edmonds (1979). He based his study on the research of Weber's (1971) study of inner city schools, and that of Brookover and Lezotte (1977) in which characteristics of effective schools were described (p. 29). Edmonds found that successful schools that work are those in which teachers set high expectations for their students and believe students can reach their goals. Teachers take on the responsibility of making sure their students learn the basics of math and reading and set clear objectives to master (p. 31). In addition, progress monitoring was constant to ensure goal attainment.

Ferguson and Hoy (1985) found that the organization as a whole, including principals, local school faculty, central office staff, and board members, make a difference. To establish the role organizational structure plays in school success, these researchers used the 1960 research of Parsons to determine four problem areas that must be addressed to efficiently determine organizational effectiveness of schools: (1) adaptation, the problem of accommodating to the environment; (2) goal attainment, the problem of setting and achieving goals; (3) integration, the problem of maintaining solidarity among elements of the system; and (4) latency, the problem of creating and maintaining the system's motivational and value patterns that must be addressed to define effectiveness (pp. 122-123). Their research led to the conclusions that effective schools: produce higher student achievement, demonstrate more efficient use of resources, adapt better to internal and external constraints, and produce greater satisfaction with school (p. 131). According to Ferguson and Hoy, determining the best model for research with these criteria has yet to be achieved.

The question of how to determine student academic achievement is more difficult to answer on some levels. Is student academic achievement only reflected at end-of-the-year tests? Is it reflected in abilities that are difficult to test objectively, such as creativity? Is it how much a student progresses during a single school year? Forsten and Grant (1999) became well known in professional development circles for a small publication entitled, *If You're Riding a Horse and It Dies, Get Off*. In this humorous book, they stated in very simplistic terms the need for teachers to look for new ideas, and for teachers and administrators not to be content with what they are doing, especially if results do not improve student achievement.

Amrein-Beardsley (2008) made the case for "Value-Added Assessment." The premise was that evaluation of effective teachers should be based on what is accomplished each year in a

classroom instead of how students compare on state mandated tests. Her study described the use and validity of the Education Value Added Assessment System (EVAAS). The first pilot tests of Value Added Assessment took place in Tennessee and North Carolina. The study, which began in 2006, followed student progress for 5 years and compared scores on state level tests and grade level tests (p. 65). While the author admitted there were flaws in the process and in the assessment tool, she continued to argue the need for schools to have various forms of assessment information, not just high stakes testing. Decisions and judgment need to emanate from variable forms of assessment.

According to Viadero (2006), since the publication of the Coleman Report in 1966, educational researchers have been on a quest to determine just how students learn and what affects that achievement both positively and negatively. According to Coleman (1966), the socioeconomic status of the student cannot be overcome by the school. Since the implementation of the *No Child Left Behind Act 2002* Legislation (No Child Left Behind, 2002), the quest has become more intense. Student achievement is formally assessed by each state through standardized end-of-the-year tests. Schools and school systems are held more accountable for how all students perform on standardized tests. Students with disabilities, English as Second Language students, and students from the lowest socioeconomic levels are expected to perform at proficient levels (Bush, 2001). Schools prepare continuous improvement plans that include the quality of teachers, resources needed, budgets, and specific achievement goals. The improvement plans grow larger every year. The NCLB legislation requires that by 2014 all students be at proficient levels, or schools will be sanctioned or even taken over by the state. This legislation has increased emphasis on determining how students learn and on making it a priority for educational researchers as well as local level administrators and teachers.

In summary, chapter 2 began with background information on research dating back to Coleman's 1966 report on student achievement to more recent research on effective schools. Since the Coleman report, research has begun to look at factors that impact student achievement. With the passage of the NCLB legislation, the responsibilities of the school have become even more important. Research studies in the areas of school academic optimism with the school level characteristics of academic emphasis, collective efficacy, faculty trust of clients, and student achievement were reviewed.

Academic emphasis is a school-level characteristic found to consistently have a positive relationship to student achievement (Bevans et al., 2007; Goddard et al., 2000; Harper & Licata, 1999; Hoy et al., 1991; Hoy & Tarter, 1997). Some research has substantiated the role of academic emphasis in improving reading and mathematics scores in elementary schools and as being more influential in academic achievement than instructional leadership. Schools that exhibit a high level of academic emphasis are personified by a positive work ethic reflected in elevated levels of student academic achievement. Schools with positive collective efficacy among the faculty seem determined to drive students toward academic success. Similarly, creating a "culture of trust" among administrators, teachers, students, and parents provides for reliability and cohesiveness (Hoy & Tarter, 1988). Although several definitions of trust can be found, according to Hoy and Tschannen-Moran (2000), each definition held similarities. The similarities included the following: (1) vulnerability, (2) confidence, (3) benevolence, (4) reliability, (5) competence, (6) honesty, and (7) openness (pp. 557-558). The influence of each component's similarity depends on the type of relationship.

Finally, literature pertaining to student academic achievement was reviewed with the understanding that all students are not prepared for school. According to Stone (2003), research

has discovered that teachers may not expect as much as they should from students who come from low income families. Thus, when low achievement is expected it is accepted. Academic optimism seems to break down the barriers presented by low SES and to create a climate of expectations that encourages teachers, students, parents, and the community. The purpose of this study was to determine the effects of the construct of academic optimism, which includes the school-level characteristics of academic emphasis, collective efficacy, and teacher trust in clients on student academic achievement.

CHAPTER 3

RESEARCH DESIGN AND METHODOLOGY

Introduction

Mandates required from No Child Left Behind (NCLB) legislation have changed the degree and range of responsibilities levied upon schools. Schools are accountable for the measured academic success of students regardless of challenges presented by socioeconomic status and other factors. Thus, as the responsibilities have changed, the role of schools has changed. NCLB has obligated schools to search for new approaches to learning and to examine various aspects of schools in terms of providing for students' academic success. The purpose of this study was to determine the impact of academic optimism on student achievement. The following research questions were addressed: Is there a positive correlation between academic optimism and student achievement as measured by fifth grade ARMT scores? What is the independent contribution that academic emphasis, collective efficacy, and faculty trust make on student achievement? This chapter includes a statement of the problem and study purposes, a description of the research design, instruments used, study sites, participants, data collection procedures, and data analysis methods.

According to Hoy, Hoy, and Tarter (2006), the definition of academic optimism is a combination of the school-level characteristics of academic emphasis, collective efficacy, and faculty trust in clients to promote successful academic achievement in students. They argued that these characteristics are intertwined to produce an environment in which high academic standards are set and achieved (p. 426). According to Hoy et al., academic optimism can enhance

what is best in schools. It reaches beyond socioeconomic boundaries to level the playing field for all students.

Problem and Purposes Overview

The purpose of this study was to determine the effects of the construct of academic optimism, which includes the school-level characteristics of academic emphasis, collective efficacy, and teacher trust in clients on student academic achievement as measured by school scores on the reading portion of the Alabama Reading and Mathematics Test. This study adds to the existing body of knowledge in the area of school improvement related to NCLB legislative mandates. The school improvements relate to establishing a quest for academic excellence, which includes setting high goals, providing an orderly and positive learning environment, motivating students, establishing trust among all stakeholders, and an appreciation for student achievement. Programs designed to prepare new administrators for schools can provide coursework and experiences to enable administrators to face the challenges of NCLB mandates by bringing about a sense of academic optimism to their schools. Implications for additional research drawn from this study are in the area of professional development for school improvement programs.

Research Design

This is an empirical study. The independent variable was academic optimism which includes the variables of academic emphasis, collective efficacy, and faculty trust in clients. The control variables were percent of free and reduced lunch students represented as socioeconomic status (SES), ratio of students to teachers, and whether schools are designated as rural or urban.

The control variable data were drawn from the State Department of Education website. This site publishes a school report card for each school in the state and each school district. Information on the report card includes calculations for the number of students in each school that receive either free or reduced lunch, the number of highly qualified teachers, and the total number of students attending the school and in each grade. Additionally, schools are reported as either rural or urban. The dependent variable was fifth grade school scores on the reading portion of the Alabama Reading and Mathematics Test given in the spring of 2008.

The study design consists of the School Academic Optimism Scale (SAOS). The three control variables were whether the school's location was designated as rural/urban, the ratio of teachers to students, and the percent of free and reduced lunch for each school reported as socioeconomic status (SES). The independent variables were academic emphasis, collective efficacy, and faculty trust in clients. The dependent variable of student achievement was measured by fifth grade reading scores on the ARMT with the school as the unit of analysis. The analysis included Level I Bivariate correlations of all variables and Level II regression to test the effect of the independent variables on the dependent variable.

Research Questions

The following research questions were addressed:

1. Is there a positive correlation between academic optimism and student achievement as measured by fifth grade ARMT scores?
2. What is the independent contribution that academic emphasis, collective efficacy, and faculty trust make on student achievement?

Instruments

Two types of data collection were used to obtain data for research. First, the SAOS (Hoy & Tarter, 2006) was administered using online surveys. Second, state assessment data were drawn from the ARMT in the area of reading. Steps leading to the development of the School Academic Optimism Scale began with the earlier work of several researchers in the field of organizational health research including work on the Organizational Health Inventory (OHI), the Collective Efficacy Scale (CE-SCALE), and the T-Scale. These formed the basis of the SAOS. Based on the work of Parsons et al. (1953), Miles (1969), and Etzioni (1975), the OHI was designed to measure the health of a school based on seven dimensions of organizational health grouped into three levels (Feldman & Feldman, 1987). The dimensions of institutional integrity, principal influence, consideration, initiating structure, resource support, morale and academic emphasis (p. 32) were grouped into the levels of technical, managerial, and institutional (p. 31). To develop the OHI, researchers generated 95 items or statements, using a 4-point Likert-type scale, to address each of the seven dimensions of organizational health, completed a pilot study, validated the statements to create a final version, and then completed factor analysis to determine reliability. Results supported both the reliability and validity of the seven dimensions of organizational health.

Following a pilot study, a second study, which included 78 schools, was conducted. The items loaded on the appropriate subtest, and the reliability scores for each subtest were relatively high with the alpha coefficients as follows: institutional integrity (.91), principal influence (.87), consideration (.90), initiating structure (.89), resource allocation (.95), morale (.92), and academic influence (.93) (p. 33). The researchers concluded that the seven dimensions of organizational health are “critical dimensions of school life and are highly reliable scales with

reasonable construct validity” (p. 36). Seven factors with eigenvalues from 14.28 to 1.35, explaining 74% of the variance, were retained. According to Hoy (1987), the stability of the factor structure of the OHI supports the construct validity of the seven dimensions of school health (p. 33). The elementary version, the OHI-E, is a 37 item 4-point Likert-type scale with a response set including *RO-rarely occurs*, *SO-sometimes occurs*, *O-often occurs*, and *V-very frequently occurs*. According to this instrument, the higher the score the greater the health of the organization (Hoy, 1987).

The Collective Efficacy Scale (CE-SCALE) (Hoy, 2005) is a 21-item scale based on the 1984 work of Dembo and Gibson on teacher efficacy, whose original scale contained a 30-item Likert-type scale. Dembo and Gibson had reduced it to that, which Hoy et al. (2005) used as their basis. After a pilot study of 70 schools, validity was tested with a 10-item test developed by Bandura (1993). Next, a second pilot test of 47 elementary schools was conducted using the 21-item scale. Criterion related validity was tested, focusing on faculty trust in colleagues and environmental press. The researchers successfully predicted a positive relationship between trust in colleagues and collective efficacy and no relationship between collective efficacy and environmental press.

The Trust Scale (T-Scale), developed by Hoy and Tschannen-Moran in 1999, is an operational measure of trust in the principal, trust in colleagues, and trust in clients, with reliabilities ranging from .90 to .98 (Hoy, 2005). The complete measure contains 35 items with factors including “willingness to be vulnerable, benevolence, reliability, competence, honesty, and openness” (Hoy & Tschannen-Moran, 2000, p. 567). A four-step process was followed to develop the T-Scale. First, a panel of experts from the Ohio State University reviewed the items. Next, a field test with six teachers was conducted in order to gain feedback on validity and item

clarity. The third step was a pilot study of 50 schools in 50 states using a 48-item survey. The final step, to determine validity and reliability of the survey as a whole, took place with elementary schools in an urban Midwestern school district. The results supported the hypothesis that the five sub-factors of trust were necessary for both individuals and groups to place their trust in others (Hoy & Tschannen-Moran, 1999).

Culminating in the SAOS, academic optimism is determined through measurement of the three school-level characteristics: academic emphasis, collective efficacy, and faculty trust in clients. From this measurement an academic optimism index was created. The SAOS includes 8 items on academic emphasis, 12 items on collective efficacy, and 10 items on faculty trust in clients. According to Hoy et al. (2006), academic emphasis is a quest for academic excellence that includes high goals, an orderly achievement environment, motivated students, and an appreciation for student achievement (p. 427). Their findings for elementary schools agreed with those of Goddard et al. (2000) that academic emphasis was particularly strong in advancing scores in both reading and mathematics. In addition, schools with high poverty and minority populations with strong academic emphasis had higher performance levels in the same two content areas.

Hoy, et al. (2006) combined the foundational research on academic emphasis, collective efficacy, and faculty trust in clients into the construct of academic optimism (p. 1). Academic optimism is viewed by Hoy as a behavioral (academic emphasis), cognitive (collective efficacy), and emotional (faculty trust) dimension. He noted that the three elements work in tandem to create a sense of hope and to inspire a desire to learn. The positive student academic achievement environment created was defined as academic optimism (p. 1), an environment Hoy et al. (2006) found to be possible at all levels of K-12 education (p. 443). Academic optimism

enables schools to see the possibilities, not the obstacles such as socioeconomic situations, in student learning.

Accountability requirements from NCLB, 2002, legislation require states to create standardized tests to assess students in grades three through eight and grade eleven each year. One of the tests used by Alabama is the Alabama Reading and Mathematics Test (ARMT). The ARMT is aligned with state content standards for reading and mathematics. Results from this test, combined with portions of the Stanford Achievement Test 10 and participation rates of students (95% of students are required to take the test) are used along with other academic indicators to determine whether schools have made adequate yearly progress (AYP) toward 100% proficiency of all students by the year 2014.

This research made primary use of data from fifth grade student reading scores on the Alabama Reading and Mathematics Test (ARMT). Students in Grades 3 through 8 are given the ARMT in the spring of each school year. This test was first administered to Grades 4, 6, and 8 in 2004 with Grades 3, 5, and 7 added in 2005. A criterion-referenced test, the ARMT is aligned to the Alabama Course of Study for reading and mathematics. Students are scored in the areas of reading and mathematics based on four levels: Level I--Does not meet academic standards, Level II--Partially meets academic standards, Level III--Meets academic content standards, and Level IV--Exceeds academic standards (Alabama State, 2008).

This data set was collected from the Alabama State Department of Education website. Combined school proficiency scores of Levels III (meets academic content standards) and IV (exceeds academic content standards) were used in the comparison. A combination of Levels III and IV are used by the Alabama State Department of Education to determine school proficiency.

Progression of performance is measured using Annual Measurable Academic Objectives (AMAO), which rise steadily to reach 100% by the year 2014.

Study Site and Participants

The study site included teachers from four systems in North Alabama, two city systems and two county systems. For the purpose of this investigation, only fifth grade scores on the reading portion of the ARMT were used in the area of reading. Also, only schools set up as kindergarten through fifth grade or kindergarten through sixth grade configurations were included. One system that met the criteria to participate in the survey (System A) was a large city system with 11 elementary schools. The second system that met the criteria to participate in the survey (System B) was another large city system with 5 elementary schools. The third system that met the criteria to participate in the survey (System C) was a large county system containing 10 elementary schools. The final system that met the criteria to participate in the survey (System D) was a small county system containing 2 elementary schools, each of which met the criteria to participate in the survey. All four systems are located in North Alabama.

Data Collection Procedure

Data collection began with a contact to each of the district superintendents to gain permission to conduct the research. Each superintendent was sent a summary of the research design, a copy of the School Academic Optimism Scale, a copy of the researcher's Internal Review Board approval, and contact information for both the researcher and the dissertation chairperson. Additionally, the same packet of information was provided to central office-level staff at the requests of the superintendents. This was followed by emails to principals in each

system to explain the research and provide them with copies of the surveys and a timeline for conducting the research. Surveys were then sent via email link, using Survey Monkey, to each elementary teacher. Assessment data were collected from the State Department of Alabama website (<http://www.alsde.edu>) for school enrollment and for performance on the ARMT in the area of reading for the 2007-2008 school year.

Data Analysis

Descriptive statistics were calculated to describe the sample of 29 schools. A correlation analysis was run using the School Academic Optimism Scale (SAOS). Control variables included whether schools are rural or urban (this variable was later deleted since only three schools were designated as rural), student to teacher ratio, and student socioeconomic status determined by the percent of free and reduced lunch students at each school. The independent variables were academic emphasis, collective efficacy, and teacher trust of clients and collectively, academic optimism. The dependent variable of student achievement was measured by fifth grade reading scores on the ARMT for each school. Further analysis included two hierarchical multiple regressions. The analysis included Level I Bivariate correlations of all variables and Level II regression to test the effect of the independent variables on the dependent variable. The first step-wise regression was run using the control variables, (SES (F/R%) and student/teacher ratio (STR), in step one and the academic optimism variable in step two. The second step-wise regression reflected the three independent variables (academic emphasis (AE), collective efficacy (CE), and faculty trust in clients (FT)), in step two. Finally, reliability was assessed by determining the Cronbach's alpha.

Summary

Since the passing of accountability mandates that made standardized tests the ruler with which schools are measured, schools have searched for the key to providing each student with a high level of academic rigor. This research proposed to measure the effects of the construct of academic optimism, which includes the school-level characteristics of academic emphasis, which generates a quest for academic excellence; a sense of collective efficacy, which creates an environment in which students are motivated to excel; and a sense of trust among teachers, students, and parents, which creates a setting for academic success. Hoy et al. (2006) argued that each of these factors is a predictor of student achievement.

To measure student achievement this research used test scores from the 2008 administration of the ARMT for fifth grade students in four systems located in North Alabama as the dependent variable. The school was the unit of analysis. Faculties were surveyed using the SOAS (Hoy et al, 2006) to measure perceptions of academic emphasis, collective efficacy, and faculty trust in clients and as independent variables. Chapter 4 reviews the data collection procedure and provides a description of each variable and a descriptive analysis of each variable. In addition, chapter 4 provides a presentation of the data with a discussion of the findings.

CHAPTER 4

RESULTS AND DISCUSSION

Schools are given the task of educating all students regardless of aptitude, interest, ethnic, or socioeconomic backgrounds. Determining the aspects of education schools can control provides a path toward increased academic success for all K-12 students. Chapter 3 presented the research design and methodology for this research. Chapter 4 presents a general summary of the data collection procedure, a description of each variable, a descriptive analysis of each variable, a presentation of the data, and a discussion of the findings.

As noted in Chapter 1, this research focused specifically on the effects of academic optimism on the relationship of the school-level characteristics of academic emphasis, collective efficacy, and trust as it explicitly relates to student academic achievement. Two research questions were analyzed for this study:

1. Is there a positive correlation between academic optimism and student achievement as measured by fifth grade ARMT scores?
2. What is the independent contribution that academic emphasis, collective efficacy, and faculty trust make on student achievement?

This study focused on the effects of academic optimism on student achievement through the school-level characteristics of academic emphasis, collective efficacy, and faculty trust in clients. The survey instrument, the School Academic Optimism Scale (SAOS), was designed to measure academic optimism. (See Appendix A for a copy of the complete survey) Academic optimism is a collective belief by a faculty that they can help all students be academically

successful by working together and trusting both students and parents to support the academic goals of the school (Hoy, Hoy, & Tarter, 2006). According to the researchers, academic optimism is a latent construct that encompasses the school-level characteristics of academic emphasis, collective efficacy, and faculty trust in clients. The SAOS is composed of 30 Likert-type items measuring these school-level characteristics. Item ratings range from 1 = *strongly disagree* to 6 = *strongly agree*. Examples of the items for collective efficacy are, “Teachers in this school believe that every child can learn” and “Students here just aren’t motivated to learn.” Examples of items for faculty trust are “Teachers in this school trust their students” and “Teachers can count upon parental support.” Examples of academic emphasis items are “The school sets high standards for performance” and “The achievement environment is orderly.”

Survey results from the SAOS were compared to fifth grade students’ scores on the reading portion of the ARMT. Students in Grades 3 through 8 were given the ARMT in spring 2008. A criterion-referenced test, the ARMT is aligned to the Alabama State Course of Study (ACOS) identified content standards in reading and mathematics. Scoring was based on four levels of proficiency with Levels 3 and 4 added together to determine proficiency. The levels are Level I--Does not meet academic standards, Level II--Partially meets academic standards, Level III--Meets academic content standards, and Level IV--Exceeds academic standards. Proficiency is based on a combination of Levels III and IV (Alabama State, 2008).

Data collection included the SAOS and fifth grade students’ reading scores from selected school districts on the ARMT (See Appendix B for demographic information). Surveys were then sent to all teachers in four school districts in North Alabama who worked in K-5 or K-6 schools. Prior to sending surveys to participating teachers, permission was gained from each of the district superintendents (see Appendix C for copy of the letter). Next, principals were sent a

copy of the survey with information regarding the purpose of the survey and evidence of superintendent approval. Due to the late timing of the survey request, and to ensure a higher response rate (during the last 2 weeks of school), two reminders were sent as follow-up requests.

The school was the unit of analysis with a total of 29 schools participating. Of the 29 schools there were a total of 993 teachers with 396 responding to the survey for a response rate of 39.8%. To introduce the data, descriptive statistics were run on the independent variables. Next, the analysis included Level I bivariate correlations of all variables and Level II regression to test the effect of the independent variables on the dependent variable to assess the relationship between academic optimism and student achievement. It was determined at this point, that since all but three schools were designated as urban, the variable of urban or rural school was not valid in the correlation. The final analyses were hierarchical multiple regressions using a step-wise regression. The first regression used the control variables, socioeconomic status (SES (F/R%)) and student/teacher ratio (STR) in step one and academic optimism in step two. The second regression used the control variables, socioeconomic status (SES (F/R%)) and student/teacher ratio (STR) in step one and the three independent variables (academic emphasis (AE), collective efficacy (CE), and faculty trust in clients (FT)) in step two. The ARMT reading scores were the dependent variable in both regressions. Alabama State Department of Education assessment data from the ARMT in the area of reading for fifth grade students were used for comparison to determine student achievement. These data were obtained from the state accountability reporting system.

Descriptive Analysis

Descriptive statistics were reported as raw data with the sample size of 29. The central tendency was presented by the mean and variability was presented as standard deviation. For all variables, the widest gap was demonstrated between the minimum and maximum values of average SES, 12 to 99. SES also showed the largest standard deviation σ 29.465 (see Table 2).

Table 2

Descriptive Statistics for All Variables

	<i>n</i>	Minimum	Maximum	Mean	Std. Deviation
Average ARMT reading	29	60.5	100	87.251	11.132
Average SES	29	12	99	37.62	29.465
Average STR	29	7.892	22.235	14.652	3.067
Average AE	29	3.484	5.450	4.668	.4355
Average CE	29	3.521	5.155	4.531	.3826
Average FT	29	2.900	5.020	4.110	.5224

n = number of schools

Bivariate Correlations

Level I bivariate correlations of all variables and Level II regression to test the effect of the independent variables on the dependent variable were run to assess the relationship between academic optimism and student achievement. There was a positive correlation between academic emphasis and student achievement ($r = .580, \rho < .01$), between academic emphasis and collective efficacy ($r = .813, \rho < .01$) and faculty trust ($r = .615, \rho < .01$). There was a positive relationship between collective efficacy and student achievement ($r = .704, \rho < .01$), between collective efficacy and faculty trust ($r = .787, \rho < .01$). There was a positive relationship between faculty

trust and student achievement ($r = .834, \rho < .01$). All variables are significant with faculty trust of clients having the highest correlation.

The data support the assumption that ARMT scores are related to all independent variables. Socioeconomic status as reported by the percent of free and reduced lunch per school, was inversely related to ARMT reading scores ($r = -.751, \rho < .01$). Thus as the percent of free and reduced lunch rises the scores on the reading portion of the ARMT go down. This supports the findings of Hoy and Smith, 2007 who argued that SES is a constant and often overwhelming factor in student achievement. However, the school level characteristics of academic optimism are significant predictors (p. 557) (see Table 3).

Table 3

Bivariate Correlations of All Variables in the Study

Variable	ARMT	SES	STR	AE	CE	FT	AO
ARMT	1.0	-.751**	.530**	.580**	.704**	.834**	.783**
SES		1.0	-.369*	-.441*	-.523**	-.655**	-.598**
STR			1.0	.337	.407*	.554**	.480**
AE				1.0	.813**	.615**	.875**
CE					1.0	.787**	.959**
FT						1.0	.891**
AO							1.0

N = 29; ** $\rho < .01$ level (2-tailed); * $\rho < .05$ level (2-tailed)

Hierarchical Regressions

Next two hierarchical multiple regressions were run. The data set used for the first run included the control variables (SES (F/R%) and STR) and academic optimism. The second data set included the control variables and the three independent variables (academic emphasis, collective efficacy, and faculty trust in clients). All variables had significant t -values with

p-values of less than .05 thus they were all significant predictors of ARMT Reading scores given all other variables in the model.

In step one of the first hierarchical multiple regression of SES (F/R%) and student/teacher ratio indicated that, SES (F/R%) and student/ teacher ratio accounted for 61% of the contribution to ARMT results ($r = 0.61$ $\rho < 0.001$). In step two with SES (F/R%) and student/ teacher ratio accounted for, and with the academic optimism variable entered, the Adjusted R-square increased from 0.61 to 0.72 ($\rho < 0.001$). The academic optimism variables accounted for an additional 12 % of the explained variance in ARMT scores over and above SES (F/R%) and student/teacher ratio. The Model Summaries for academic optimism and for the combined effect of the independent variable demonstrate that all variables were strong predictors of reading scores on the ARMT. Control variables had an $R^2 = .638$ and an Adjusted $R^2 (.611)$. When academic optimism was entered into the equation with an $R^2 = .756$ and an Adjusted $R^2 (.727)$ thus 12% of the variance on the reading portion of ARMT was explained by academic optimism (see Table 4).

Table 4

Model Summary of Relationship of Control Variables and Academic Optimism

Model	<i>R</i>	R^2	Adjusted R^2	Std. Error of the Estimate
1	.799 ^a	.638	.611	6.9473
2	.870 ^b	.756	.727	5.8177

^a Predictors: (Constant), Student/Teacher Ratio, SES (%F/R)

^b Predictors: (Constant), Student/Teacher Ratio, SES (%F/R), Academic Optimism
Dependent Variable = ARMT Reading.

Control variables had an $R^2 = .638$ and an adjusted $R^2 (.611)$. When academic emphasis, collective efficacy, and faculty trust in clients were added to the equation the R^2 increased to R^2

(.782) and the Adjusted R^2 (.735) thus 13 % of the variance on the reading portion of ARMT was explained by academic emphasis, collective efficacy, and faculty trust in clients with the variable of faculty trust having the highest contribution to success on the reading portion (see Table 5).

Table 5

Model Summary of Relationship between Variables

Model	R	R^2	Adjusted R^2	Std. Error of the Estimate
1	.799 ^a	.638	.611	6.9473
2	.884 ^b	.782	.735	5.7344

^aPredictors: (Constant), Student/Teacher Ratio, SES (%F/R)

^bPredictors: (Constant), Student/Teacher Ratio, SES (%F/R), Academic Emphasis, Faculty Trust, Collective Efficacy

Dependent Variable = ARMT Reading.

The standardized regression coefficients (β 's) were calculated to determine the individual effect of academic optimism. In this step the variable of academic optimism ($\beta = .457, \rho < .002$) had a higher contribution than the demographic variables of SES (F/R%) ($\beta = -.420, \rho < .002$) and student/teacher ratio ($\beta = .155, \rho < .182$). These findings answer the first research question: there is a positive correlation between academic optimism and student achievement as measured by fifth grade ARMT scores. This proved that academic optimism had a significant contribution to success on ARMT reading scores even after accounting for SES (FR%) and STR. (See Table 6 next page)

Table 6

Hierarchical Regressions for Academic Optimism for Combined Districts

	Unstandardized coefficients B	Standard Error	Standardized coefficients β
Step 1			
SES (% F/R)	-.243	.048	-.643
Student/Teacher Ratio	1.062	.461	.293
$R = .79$ $R^2 = .64$			
Step 2	-.159	.047	-.420
SES (%F/R)	.564	.411	.155
Teacher/Student Ratio	.021	.006	.457
AO			.
$R = .87$ $R^2 = .76$			

^aDependent variable: ARMT Reading

As predicted, all independent variables (academic emphasis, $\beta = .037$, $\rho < .82$, collective efficacy $\beta = .093$, $\rho < .67$ and faculty trust $\beta = .451$, $\rho < .03$) independently explained a significant proportion of relationship to ARMT scores with faculty trust being the most dominant. Thus the second research question is answered: what is the independent contribution that academic emphasis, collective efficacy, and faculty trust make on student achievement? Further, these data confirms that the combination of academic optimism, collective efficacy, and faculty trust in clients positively affects student learning (see Table 7).

Table 7

Correlations of Coefficients for Combined Districts

	Unstandardized coefficients B	Standard Error	Standardized coefficients β
Step 1			
SES (% F/R)	-.243	.048	-.643
Student/Teacher Ratio	1.062	.461	.293
$R = .79$ $R^2 = .64$			
Step 2	-.134	.049	-.354
SES (%F/R)	.361	.425	.099
Teacher/Student Ratio	.947	4.303	.037
Academic Emphasis	2.701	6.264	.093
Collective Efficacy Faculty Trust	9.618	4.106	.451
$R = .88$ $R^2 = .78$			

^aDependent variable: ARMT Reading

Reliability

This study found a Cronbach's Alpha of .88 which further attested to strong internal item consistency. These are comparable to findings by Hoy et al. (2006), which determined the reliability of the SAOS with an internal consistency as indicated by an alpha of (AE .94, CE. 94, and FT. 96) (see Table 8).

Table 8

Item Total Reliability Statistics

	Scale mean if item deleted	Scale variance if item deleted	Corrected item total correlation	Cronbach's Alpha if item deleted
AE	8.6422	.734	.738	.857
CE	8.77943	.743	.888	.754
FT	9.20002	.607	.730	.893

Summary

Chapter 4 presented a brief background of the research, a summary of the data collection procedure, a description and note of previous research for each variable, a descriptive analysis of each variable, and a report of the findings. This study examined two research questions:

1. Is there a positive correlation between academic optimism and student achievement as measured by fifth grade ARMT scores?
2. What is the independent contribution that academic emphasis, collective efficacy, and faculty trust make on student achievement?

Specifically, this research was conducted to determine the effects of academic optimism on student achievement including the school-level characteristics of academic emphasis, collective efficacy, and teacher trust in clients. The research indicated positive correlations between academic optimism and student achievement as measured by fifth grade reading scores on the ARMT. Therefore, these data supported the hypothesis that academic optimism is certainly a plausible predictor of student achievement. Chapter 5 presents a discussion of the results and recommendations for future research in the area of academic optimism.

CHAPTER 5

SUMMARY AND DISCUSSION

Academic optimism is an attractive concept because it emphasizes potential. There is real value to focusing on potential with its strength and hope, rather than pathology with its weakness and helplessness. (W. Hoy, personal communication, October 10, 2009)

The Coleman Report (1966) directed the focus of educational research toward characteristics that affect student education. Coleman's theory that socioeconomic status (SES) had more impact on student academic achievement than school characteristics launched a wave of research to dispute his finding. Although SES is not ignored as a factor in student learning, there are other school-level factors that make a difference. According to Hoy et al. (2006), Edmonds (1979) led the quest through his effective schools research to dispute Coleman. Edmonds created a list of school-level characteristics that impact student learning: (1) strong principal leadership, (2) high expectations, (3) emphasis on basic skills, (4) an orderly environment, and (5) frequent and systematic evaluation of students (p. 425). Hoy and his colleagues took this a step further as they searched for specific contributors that led to student academic achievement.

Educators today are as concerned with student scores on standardized tests as they are with safety, maintenance, finance, and staffing due to the passage of NCLB 2002 legislation and sanctions faced by schools that do not make adequate yearly progress (AYP). With the passage of NCLB, immediacy was required to determine the school-level characteristics that promote

student achievement. Carved from the work of educational researchers in the areas of academic emphasis (Goddard, Hoy, & Sweetland, 2000; Harper & Licata, 1999; Hoy, Tarter, & Kottkamp, 1991; Hoy & Tarter, 1997), collective efficacy (Bandura, 1969, 1977, 1993; Edmonds, 1979; Hoy, Kottkamp, & Tarter, 1991; Hoy, Tarter, & Witkoskie, 1992), faculty trust in clients (Hoy & Tarter, 1988; Hoy & Tschannen-Moran, 2000; Sergiovanni, 2005) and student achievement (Amrein-Beardsley, 2008; Bandura, 1993; Edmonds, 1979; Lezotte, 1977) this researcher study sought to determine the collective effect of academic optimism on student academic achievement. The focus was on the independent contribution of academic emphasis, collective efficacy, and faculty trust in clients as they influence student academic achievement and as they combine to create a sense of academic optimism.

Academic optimism was defined by Hoy et al. (2006) as the linking of academic emphasis, collective efficacy, and faculty trust in clients that created group norms which were applied to group perceptions as emergent organizational attributes (p. 430). Hoy and his colleagues examined the individual school traits at the high school and middle school level that impact student achievement and the combination of these to create an optimal environment for learning thus creating a sense of the possibilities (Hoy et al., 2006). Controlling for socioeconomic status, previous achievement, and urbanicity, Hoy and his colleagues predicted academic optimism as a significant contributor to academic achievement. The researchers refer to Goddard et al. (2000) who applied this model to elementary schools and showed a positive correlation to both reading and math scores especially in poor students (p. 427).

Based on earlier research on effective schools, such as Edmonds (1979), Goddard et al. (2000) investigated the influence of academic emphasis on school effectiveness. The researchers argued that academic emphasis defined the normative behavior of a school (p. 686). In addition,

when applied to the demands of accountability, academic emphasis of a school fosters academic success. The more positive the attitudes of the teachers, the students, and the parents, the more positive the adjustment and acceptance of accountability challenges. Later research by Hoy et al. (2006) cites both Bryk and Lee (1989) and Hoy et al. (1991) as groundbreaking research in the study of academic emphasis. Their respective research showed a direct relationship between academic emphasis and student learning when controlling for socioeconomic status (p. 427). Although the relationship between academic emphasis and student academic achievement in the current study was moderate (-.126), the results add credibility to the argument that academic emphasis, in conjunction with collective efficacy and faculty trust in clients, creates an environment supportive of academic optimism.

Edmonds (1979) found that in schools in which the teachers set high expectations, the students perform with greater levels of success. The research of Hoy et al. (2002) cited collective efficacy of teachers as a key variable in student academic achievement. They argued that collective efficacy impacts student achievement at a greater level than student socioeconomic status. In the current study, collective efficacy demonstrated a positive relationship to student achievement (.180).

Goddard et al. (2000) found that a positive collective teacher efficacy begins with individual teacher efficacy, which positively affects student achievement. Hoy et al. (2005), illustrated the cyclical nature of teacher efficacy from the sources of efficacy (physiological clues, verbal persuasion, vicarious experience, mastery experience) to cognitive processing to both analysis of teaching the tasks and assessment of teaching competence to teacher efficacy to consequences of teacher efficacy (effort, persistence, success) to performance then back to sources of efficacy (p. 154). Hoy et al. (2006) defined collective efficacy as the belief among

faculty members that the school as a whole can achieve stated goals to insure student academic achievement. They argued that collective efficacy pushed teachers to champion the students and their schools. Teachers were more willing to put in extra time and a sustained effort to advance student achievement.

Hoy et al. (1988) argued that trust is the cornerstone to professional relationships that promote student achievement. It permeates decision making, goal setting, and professional development. The researchers maintained that trust is the basis for effective relationships among colleagues; it is crucial to effective communication, teamwork, and emergent leadership. Although trust in schools is hard to define there are some similarities that seem to emerge. Hoy et al. (2000) found six common facets, which included the following: (1) vulnerability, (2) confidence, (3) benevolence, (4) reliability, (5) competence, (6) honesty, and (7) openness (pp. 557-558). In the current study, faculty trust in clients demonstrated a positive relationship to student achievement (.132).

A study by Hoy et al. (2001) on the organizational health of high schools concentrated on faculty trust and the reciprocal effects of a healthy organizational climate on faculty trust (p. 138). Just as a healthy school climate facilitates faculty trust, an unhealthy school climate destroys or prevents faculty trust from developing. Although the researchers limited their study to high schools, Hoy and colleagues questioned whether the inclusive trust that elementary teachers place with students and parents would be the same or would teachers at the high school level separate the two groups. The results of this study indicated that teacher morale was the greatest predictor of faculty trust in colleagues, and that faculty trust in principals was highest in schools where the principal was supportive and was an active participant in the pursuit of school goals; finally, faculty trust of students and parents was the same at all levels.

This study examined the effects of the latent construct of academic optimism focusing on the relationship of the school-level characteristics of academic emphasis, collective efficacy, and faculty trust in clients as it explicitly relates to student academic achievement. Specifically, the research focused on two questions: Is there a positive correlation between academic optimism and student achievement as measured by 5th grade ARMT scores? What is the independent contribution that academic emphasis, collective efficacy, and faculty trust make on student achievement? This chapter reviews the problem, the methodology used to conduct the study, a summary of the results, and a discussion of those results and their possible applications.

Summary of Procedures

A correlation analysis was run using the School Academic Optimism Scale (SAOS). Control variables included whether schools are rural or urban (this variable was later deleted since only three schools were designated as rural), student to teacher ratio and student socioeconomic status determined by the percent of free and reduced lunch students at each school. The independent variables were academic emphasis, collective efficacy, and teacher trust of clients and collectively academic optimism. The dependent variable of student achievement was measured by fifth grade reading scores on the ARMT for each school.

The analysis included Level I Bivariate correlations of all variables and Level II regression to test the effect of the independent variables on the dependent variable. Further analysis included two hierarchical multiple regressions. The first step-wise regression was run using the control variables, (SES (F/R%) and student/teacher ratio (STR) in step and only the variable of academic optimism in step two. The second regression used the three independent variables (academic emphasis (AE), collective efficacy (CE), and faculty trust in clients(FT)) in

step two. The research sample included teachers in four North Alabama school districts in schools with a kindergarten or first grade through sixth grade configuration in which the principal had been in place for a minimum of 3 years.

Teacher responses to the SAOS ultimately reflected the academic optimism of the schools and the districts. Items included in the School Academic Optimism Scale demonstrated the link between all three school-level characteristics that determine academic optimism. Items for academic emphasis include (1) Students respect others who get good grades and (2) The school sets high standards for performance. For collective efficacy, (1) Teachers in this school believe that every child can learn and (2) The opportunities in this community help ensure that these students will learn. For faculty trust in clients, (1) Students in this school care about each other and (2) Teachers think that most of the parents do a good job. This link suggested that schools with high standards, a respect for learning, and a respect for all stakeholders in education have a sense of optimism that translates into successful student academic achievement. Thus academic optimism defined the teachers, principal, and parents as a group who has the same expectations, the same work ethic, the same sense of dedication, and the same achievement goals for the students.

ARMT reading scores are a part of the overall accountability rating for schools and districts in Alabama used to determine Adequate Yearly Progress (AYP). Fifth grade students are tested in the areas of reading, mathematics, social studies, science, and language using the ARMT and the Stanford Achievement 10. Only reading and mathematics scores are used to determine AYP for schools. School reports are disaggregated by total students, race, gender, ethnicity, SES, and special education. Results of state testing are summarized on state report cards in terms of individual schools, districts, and the state as a whole. These reports are made

public through the State Department of Education to local news media outlets and are available on the state website.

Discussion of the Results

As stated in the opening chapter, this research focused specifically on the effects of academic optimism in relation to the school-level characteristics of academic emphasis, collective efficacy, and faculty trust in clients as they explicitly relate to student academic achievement. The findings for the study included the following:

1. There was a positive correlation between academic emphasis and student achievement ($r = .580$).
2. There was a positive correlation between collective efficacy and student achievement ($r = .704$).
3. There was a positive correlation between faculty trust and student achievement ($r = .834$).
4. There was a positive relationship between academic emphasis and collective efficacy ($r = .813$) and faculty trust ($r = .615$).
5. There was a positive relationship between collective efficacy and faculty trust ($r = .787$).
6. Academic optimism proved a strong predictor of reading scores on the ARMT (Adjusted $R^2 = .61$)
7. All independent variables were strong predictors of reading scores on the ARMT (Adjusted $R^2 = .74$).
8. Reliability was indicated by a Cronbach's Alpha of .88.

What is the independent contribution that academic emphasis, collective efficacy, and faculty trust make on student achievement? According to Hoy et al. (2006), there is a reciprocal relationship between collective efficacy, faculty trust, and academic emphasis. All three concepts promote possibilities (p. 431). Thus, when school faculties trust their students and the parents there is a sense of collective efficacy. Collective efficacy encourages trust by teachers to set high academic expectations for students secure in the support of the parents. Additionally, a sense of collective efficacy that high expectations will promote increased student achievement reinforces collective efficacy (p. 431).

The findings of this research support the argument that academic optimism positively contributes to student achievement as measured by fifth grade reading scores on the ARMT even with SES factored into the equation. These findings agree with those of several researchers (Hoy, 2009; Hoy et al., 2006; McGuigan & Hoy, 2006; Smith & Hoy, 2007) who found that the collective contributions of academic emphasis, collective efficacy, and faculty trust in clients contribute positively to student academic achievement when controlling for SES.

This study demonstrated a positive relationship between academic emphasis and student achievement on the ARMT ($r = .580$). Hoy (1992) considered academic emphasis as a behavioral dimension because it is a thrust toward certain behaviors. A more recent study by Hoy et al. (2008) examined academic emphasis as a tone set by principals that facilitates student achievement. The researchers found that both poor and minority students performed at higher levels in an elementary school with strong academic emphasis.

Collective efficacy is the belief among faculty members that the school as a whole can achieve stated goals that will impact student achievement. Here the analysis demonstrated a positive relationship ($r = .704$) to student achievement. Hoy et al. (2002) agreed with the 1993

work of Bandura, who found that groups with high collective efficacy pursued more rigorous goals. Hoy et al. (2002) found that collective efficacy can be a powerful variable in student achievement. The researchers explained that high collective efficacy of a faculty resulted in teacher confidence, which led to a determination to see students succeed. They said that it resulted in the ability to see failure as a motive to try harder.

The work of Goddard, Hoy, and Hoy (2004) took the findings of collective efficacy from schools to business. The researchers found that just as collective efficacy and student achievement are dependent upon each other, there is also a link between collective efficacy and work group effectiveness (p. 4). Goddard et al. (2004) found that the manner in which students and teachers approach a task depends on their feelings of efficacy both individually and as a group. The authors cited Buffard-Bouchard, Parent, and Larivee (1991) who found that children with a high sense of self efficacy applied their skills in working math problems more consistently and more effectively than those with low self efficacy.

Hoy (2005) treated collective efficacy as a cognitive dimension given that the group has a common focus or goal. Tschannen-Moran (2009) argued that schools are made up of professional educators with expertise in a variety of areas. School structures that foster teachers' expertise and encourage idea sharing provide for a more committed faculty willing to work effectively as a group. (In the scoring procedure, scores were reversed for items 3, 4, 8, 9, 11, and 12 for collective efficacy on the SAOS.)

The analysis showed faculty trust had a positive relationship ($r = .834$) to student academic achievement and was a predictor of student learning as related to the ARMT. Faculty trust is defined as trust in students and their parents by teachers and administrators (Hoy, 1992). Hoy considered faculty trust an emotional dimension. Hoy and Tschannen-Moran (1999)

described the five facets of trust as related to school faculties and determined that teacher trust in the principal and other faculty members establishes a sense of confidence in creating and implementing plans that promote student achievement (p. 209). A 2009 study by Tschannen-Moran focused on the role of faculty trust in relation to principal leadership. She found that principals who micromanage, use a machine bureaucracy, or create an abundance of rules lose the trust of the faculty. The faculty may become disloyal and lose their sense of commitment. She also points out that the very attributes many bureaucratic principals want to avoid may actually be created (p. 223).

Berebitsky et al. (2009) hypothesized that when a faculty trusts both students and parents, student achievement is positively influenced. In addition, they hypothesized that faculty trust was predicted by the SES and racial makeup of the student body. However, their research indicated that although there is a positive relationship between trust and student achievement, trusting relationships may be harder to form in schools with a majority of students from low income families due to a difference in “cultural values and ethical standards” (p. 308).

Collectively, academic optimism ($r = .783$) demonstrated a positive relationship to student learning on the reading portion of the ARMT for fifth grade students. Hoy et al. (2006) found that the relationship between the school level characteristics of academic emphasis, collective efficacy, and faculty trust in clients can be seen as triadic. These three characteristics interact with each other and are dependent upon each other (p. 428).

The findings in this study confirm that there is a positive correlation between academic optimism and student achievement as measured by fifth grade ARMT scores. Further, the data demonstrate the independent contribution that academic emphasis, collective efficacy, and faculty trust make on student achievement. There was a positive triadic relationship between all

academic optimism variables and student achievement. Collectively, all variables were strong predictors of reading scores on the ARMT.

Practical Implications from This Study

These findings support further research into the school-level characteristics that may affect student academic success and thus school success as determined by NCLB. This study supported the proposal that academic emphasis, collective efficacy and faculty trust in clients work hand in hand to promote student achievement, since ARMT scores for all four districts were positively related to all variables. The results support Hoy's argument that schools with a sense of academic optimism exhibit school-level characteristics of academic emphasis, collective efficacy, and faculty trust in clients. This study demonstrates the significance of building on previous research to further determine the effects of academic optimism on student achievement. The results of this study suggest confirmation that the academic optimism of a school is positively related to the academic success of the students when factoring in socioeconomic factors and student/teacher ratios.

These results can be used in the area of school improvement to assist in the development of school improvement plans, which are required each year in the state of Alabama. In Alabama there is a correlation between Adequate Yearly Progress and School Improvement Plans. Schools that do not meet the required participation rate (95%), annual measurable objectives (AMO) in reading and math, and the additional academic indicators (AAI) are placed in "school improvement." These schools are required to write a school improvement plan (formerly known as continuous improvement plan) detailing the steps that will be taken to ensure meeting all goals the following year. Schools that do not meet AYP for 2 years in a row in the same component are

required to submit their school improvement plan to the state for approval. In addition, the school must submit to monthly progress monitoring of the plan by district school improvement specialists, and on some occasions representatives from the state department of education. If schools make AYP the following year they maintain their improvement status in “delay” until the end of the following school year.

School improvement plans must include three goals written as objectives with benchmarks and strategies to measure progress toward those goals. Various forms of information are used to develop goals and strategies including standardized scores, faculty surveys on leadership, professional development considered necessary, school supply and equipment needs, technology needs, SES data, attendance data, and discipline data. Schools and school districts are required to gain teacher and community input and to allow teachers to be a part of the development and implementation of the school improvement plans. Additionally, because in this study the researcher found correlations between academic optimism and reading scores on the ARMT for fifth grade students, it is reasonable for this research to be used as a tool for identifying potential needs for schools to use to improve student test scores and reach AMO proficiency goals by 2014.

Conclusion

This researcher identified the possibilities that a sense of academic optimism can impact elementary schools in the area of reading scores for fifth grade students on the ARMT. Similar results have been found for middle and high schools (Hoy et al., 2002; McGuigan & Hoy, 2006; Hoy, Tarter, & Hoy, 2006). Although a preliminary study, the findings confirm the value of creating an environment conducive to learning for all students and for continued research into the

effects of academic optimism and each of the school-level characteristics. Further, it supports Bandura's (1969) social cognitive theory as applied to education for academic outcomes. The results of this study support the hypothesis that academic optimism positively affects student academic achievement. These findings support the earlier work of educational researchers from Edmonds and Lezotte to Hoy that a school or school district that generates a feeling of academic optimism may experience benefits through improved test scores, and knowledge that students are better prepared for a global economy.

A recent memo from the Alabama state superintendent reflected changes in the Alabama Student Assessment Plan (Morton, Alabama State Department of Education, 2009). This plan includes using the ARMT as a stand-alone assessment for Grades 3 through 8 without the Stanford Achievement Test 10 (SAT 10), which is currently used in conjunction with the ARMT. Among the other changes is a plan to discontinue the Alabama High School Graduation Exam and replace it with end-of-course tests that will count for 20% of the course grade. These changes will be implemented over a 5-year period. Implications from this plan render this research timely in that schools will need to pay greater attention to ARMT specifications in order to meet AYP in the future.

It is hoped that this research will enable school systems and individual schools to improve, and to provide for students' academic needs without a particular reliance on financial support. It is the hope of this researcher that this study will lead to further inquiries into the provision of opportunities and strategies for all students to achieve academic success and thereby become productive citizens.

REFERENCES

- Adams, C., & Forsyth, P. (2006). Proximate sources of collective teacher efficacy. *Journal of Educational Administration*, 44(6), 625-642
- Alabama State Department of Education. (2008). *Accountability reporting system*. Montgomery, AL: Alabama State Department of Education.
- Alabama State Department of Education/Southern Regional Education Board. (2005). *Using data to lead change: Alabama data driven school improvement plan training manual*. Montgomery, AL: Alabama State Department of Education.
- Amrein-Beardsley, A. (2008). Methodological concerns about the education value-added assessment system. *Educational Researcher*, 37(2), 65-75.
- Arredondo Rucinski, D., & Bauch, P. (2006). Reflective, ethical, and moral constructs in educational leadership preparation: effects on graduates' practice. *Journal of Educational Administration*, 44(5), 487-508.
- Bandura, A. (1969). Social-learning theory of identificatory processes. In D. Goslin (Ed.), *Handbook of socialization theory and research* (pp. 213-216). Skokie, IL: Rand McNally.
- Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review*, 84(2), 191-215.
- Bandura, A. (1993). Perceived self-efficacy in cognitive development and functioning. *Educational Psychologist*, 28(2), 117-148.
- Berebitsky, D., Goddard, R., & Sallom, S. (2009). Trust as a measure of the relationship between poverty, racial composition, and academic achievement: Evidence from Michigan's public elementary schools. *Educational Administration Quarterly*, 45(2), 292-311.
- Bevans, K., Bradshaw, C., Leaf, P., & Miech, R. (2007). Staff and school level predictors of school organizational health: A multilevel analysis. *The Journal of School Health*, 77(6), 294-302.
- Bussey, L., & Everson, S. (2007). Educational leadership for social justice: enhancing the ethical dimension of educational leadership. *Catholic Education*, 11(2), 176-187.
- Bush, G. W. (2001). *No Child left Behind*. Washington D.C.: The White House. Retrieved November 29, 2008, from <http://www.whitehouse.gov/news/reports/no-child-left-behind.html#1>.

- Cohen, R., Curtis, M., Poth, R., & Stollar, S. (2006). Collaborative strategic planning as illustration of the principles of systems change. *The School Psychology Review, 35*(2), 181-197.
- Coleman, J. A. (1988). "Social capital" and schools. *The Education Digest, 53*(8), 6-9.
- Coleman, J., Campbell, E., Hobson, C., Mood, A., Winfield, F., & York, R. (1966). *Equality of educational opportunity* (Report number OE-38001). Washington, DC: Government Printing Office.
- Cotton, K. (1995). *Effective schooling practices: A research synthesis 1995 update* (Office of Educational Research and Improvement, pp. 1-105). Washington, DC: U.S. Department of Education. Retrieved June 19, 2009, from <http://www.nwrel.org/scpd/esp/esp95.html>.
- Daugherty, R., Kelley, R., & Thornton, B. (2005). Relationships between measures of leadership and school climate. *Education, 126*(1).
- Deal, T., & Peterson, K. (1999). *Shaping school culture*. San Francisco: Jossey-Bass.
- DiPaola, M., & Hoy, W. (2008). *Improving schools: Studies in leadership and culture*. Charlotte, NC: Information Age Publishing.
- Edmonds, R. (1979). Some schools work and more can. *Social Policy, 28*-32. Retrieved May 6, 2008, from <http://vnweb.hwilson.comlibdata.lib.ua.edu>
- Edmunds, B., Ewington, J., Kendall, D., Kendall, L., Mulford, B., & Silins, H. (2007). Successful school leadership. *Australian Journal of Educational, 3*(51), 228-246.
- Feldman, J. A., & Hoy, W. K. (1987). Organizational health: The concept and its measure. *Journal of Research and Development in Education, 20*(4), 36.
- Ferguson, J., & Hoy, W. (1985). A theoretical framework and exploration of organizational effectiveness of schools. *Educational Administration Quarterly, 21*(2), 117-134.
- Forsten, C., & Grant, J. (1999). *If you're riding a horse and it dies get off*. Peterborough, NH: Crystal Springs Books.
- Fris, J., & Lazaridou, A. (2006). An additional way of thinking about organizational life and leadership. *Canadian Journal of Educational Administration (48)*, 1-12.
- Goddard, R., Hoy, A., & Hoy, W. (2000). Collective teacher efficacy: Its meaning, measure and impact on student achievement. *American Educational Research Journal, 37*(2), 479-507.
- Goddard, R., Hoy, A., & Hoy, w. (2004). Collective efficacy beliefs: Theoretical developments, empirical evidence, and future directions. *Educational Researcher, 33*(3), 3-13. Retrieved March 6, 2010, from <http://vnweb.com.libdata.lib.ua.edu>.

- Goddard, R., Hoy, W., & Sweetland, S. (2000). Academic emphasis of urban elementary schools and student achievement in reading and mathematics: A multi-level analysis. *Educational Administrative Quarterly*, 36(5), 683-702.
- Harper, G., & Licata, J. (1999). Healthy schools, robust schools and academic emphasis as an organizational theme. *Journal of Educational Administration*, 37(5), 463-475.
- Hoy, A. W., Hoy, W. K., & Tarter, C. J. (2006). Academic optimism of schools: A force for student achievement. *American Education Research Journal*, 43(3), 425-446.
- Hoy, W., & Miskel, C. G. (2005). *Educational administration* (7th ed.). Boston: McGraw Hill.
- Hoy, W., & Smith, P. (2007). Academic Optimism and student achievement in urban elementary schools. *Journal of Educational Administration*, 45(5), 556-568.
- Hoy, W., Smith, P. & Sweetland, S. (2001). Organizational health of high schools and dimensions of faculty trust. *Journal of School Leadership*, 11, 135-150.
- Hoy, W., Smith, P., & Sweetland, S., (2002). Toward an organizational model of achievement in high schools: The significance of collective efficacy. *Educational Administrative Quarterly*, 38(1), 77-93.
- Hoy, W., Smith, P., & Sweetland, S. (2003). The development of the organizational climate index. *The High School Journal*, 86(2), 38-49.
- Hoy, W., Tarter, C. J., & Witkoskie, L. (1992). Faculty trust in colleagues: Linking the principal with school effectiveness. *Journal of Research and Development in Education*, 26(1), 38-45.
- Hoy, W. K. (2005). *Collective Efficacy Scale*. Retrieved November 2, 2008, from Ohio State University Web site: http://www.waynehoy.com/collective_efficacy.html.
- Hoy, W. K., & McGuigan, L. (2006). Principal leadership: Creating a culture of academic optimism to improve achievement for all students. *Leadership and Policy in Schools*, 5(3), 203-229.
- Hoy, W. K., Kottkamp, R. B., & Tarter, C. J. (1990). School health and organizational commitment. *Journal of Research and Development in Education*, 23(4), 236-242.
- Hoy, W. K., Kottkamp, R. B., & Tarter, C. J. (1991). *Open schools/healthy schools*. New Berry Park, CA: Corwin Press.
- Hoy, W. K., & Tarter, C.J. (1988). The context of trust: teachers and the principal. *The High School Journal*, 17-24.
- Hoy, W. K., & Tschannen-Moran, M. (1998). Trust in schools: a conceptual and empirical analysis. *Journal of Educational Administration*, 36(4), 334-352.

- Hoy, W. K., & Tschannen-Moran, M. (1999). Five faces of trust: An empirical confirmation in urban elementary schools. *Journal of School Leadership*, 9, 184-208.
- Hoy, W. K., & Tschannen-Moran, M. (2000). A multidisciplinary analysis of the nature, meaning, and measurement of trust. *Review of Educational Research*, 70(4), 547-593.
- Hoy, W. (1985). A theoretical framework and exploration of organizational effectiveness of schools. *Educational Administration Quarterly*, 21(2), 117-134.
- Hoy, W. (2009) *School Academic Optimism Scale*. Retrieved July 31, 2009, from Ohio State University Web site: <http://www.waynehoy.com/collective-ao.html>.
- Karney, J. F. (2007). The relationship between the principal's perceived supportive leadership and school outcomes. *Dissertation Abstracts*. (UMI No. 3264372).
- Kitsantas, A., & Ware, H. (2007). Teacher and collective efficacy beliefs as predictors of professional commitment. *The Journal of Educational Research*, 5(100), 303-310.
- Lezotte, L. (1970). *Revolutionary and evolutionary: The effective schools movement*. Retrieved June 12, 2008, from http://ali.apple.com/ali_media/users/1000059/files/otheres/lezotte_article.pdf.
- Lumpa, D., Whitaker, B., & Whitaker, T., (2000). *Motivating and Inspiring teachers*. Larchmont, NY: Eye on Education.
- McGranahan, D. A. (1994). Rural America in the global economy: Socioeconomic trends. *Journal of Research in Rural Education*, 10(3), 139-148.
- No Child left Behind*. (2002). Retrieved February 21, 2009, from <http://www.ed.gov/policy/elsec/guid/states/index.html>.
- O'Donnell, R. J., & White, G. (2005). Within the accountability era: Principals' instructional leadership behaviors and student achievement. *NASSP Bulletin*, 89(645), 56-71.
- Parsons, T. (1950). The prospects of sociological theory. *American Sociological Review*, 15(1), 3-16.
- Pearson, P., Peterson, D., Rodriguez, M., & Taylor, B. (2002). *The CIERA school change project: Supporting schools as they implement home grown reading reform* (Ciera.org, pp. 1-35). Ann Arbor, MI: University of Michigan.
- Rafferty, T. J. (2003). School climate and teacher attitudes toward upward communication in secondary schools. *American Secondary Education*, 2(31), 49-70.
- Sagor, R. (2008). Cultivating optimism in the classroom. *Educational Leadership*, 65(6), 26-31.
- Sergiovanni, T. (2005). The virtues of leadership. *The Educational Forum*, 2(69), 112-123.

- Smith, A. D. (2007). *Perceptions of trustworthiness: Direct-report perceptions of supervisor trustworthiness*. (Unpublished master's thesis, Pepperdine University, Malibu, CA).
- Stone, C. (2003). Civic capacity-what, why, and whence. *Institutions of Democracy: Public Education*. Retrieved April 11, 2008, from Personal webpage of Clarence N. Stone Web site: <http://www.bsos.umd.edu/gvpt/stone>.
- Tschannen-Moran, M. (2009). Fostering teacher professionalism in schools: The role of leadership orientation and trust. *Educational Administration Quarterly*, 45(2), 217-247.
- The new rules. (2002). *Frontline*. Retrieved November 23, 2009, from <http://www.pbs.org/wgbh/pages/frontline/shows.schools.nochild/nclb.html>
- Viadero, D. (2006). Race report's influence felt 40 years later: Legacy of Coleman study was new view of equity. *Education Week*, 25(41), 21-24.
- Vodicka, D. (2007). *Social capital in schools: Teacher trust for school principals and the social networks of teachers*. (Unpublished master's thesis, Pepperdine University, Malibu, CA).

APPENDIX A
SCHOOL ACADEMIC OPTIMISM SCALE

School Academic Optimism Scale (SAOS)

Indicate the degree to which these statements are true about your school from strongly disagree (1) to strongly agree (6). Your answers are confidential.

Collective Sense of Self-Efficacy Item

- 1. Teachers in this school are able to get through to the most difficult students.
- 2. Teachers here are confident they will be able to motivate their students.
- 3. If a child doesn't want to learn teachers here give up.
- 4. Teachers here don't have the skills needed to produce meaningful results.
- 5. Teachers in this school believe that every child can learn.
- 6. These students come to school ready to learn.
- 7. Home life provides so many advantages that students are bound to learn.
- 8. Students here just aren't motivated to learn.
- 9. Teachers in this school do not have the skills to deal with student disciplinary problems.
- 10. The opportunities in this community help ensure that these students will learn.
- 11. Achievement is more difficult at this school because students are worried about their safety.
- 12. Drug and alcohol abuse in the community make achievement difficult for students here.

Faculty Trust in Student and Parents Items

- 1. Teachers in this school trust their students.
- 2. Teachers in this school trust the parents.
- 3. Students in this school care about each other.
- 4. Parents in this school are reliable in their commitments./li>
- 5. Students in this school can be counted upon to do their work.
- 6. Teachers can count upon parental support.

- 7. Teachers here believe that students are competent learners./li>
- 8. Teachers think that most of the parents do a good job.
- 9. Teachers can believe what parents tell them.
- 10. Students here are secretive.

Academic Emphasis Items

- 1. The school sets high standards for performance.
- 2. Students respect others who get good grades.
- 3. Students seek extra work so they can get good grades.
- 4. Academic achievement is recognized and acknowledged by the school.
- 5. Students try hard to improve on previous work.
- 6. The achievement environment is orderly and orderly.
- 7. The students in this school can achieve the goals that have been set for them.
- 8. Teachers in this school believe that their students have the ability to achieve academically.

APPENDIX B
SCHOOL DEMOGRAPHIC DATA

School Demographic Data

System	School	teachers (size)	R/U	SES (%F/R)	ARMT Reading Proficiency
<i>A</i>	<i>A1</i>	32	Urban	14	97.3
	<i>A4</i>	37	Urban	33	73.91
	<i>A6</i>	17	Urban	39	89.28
	<i>A8</i>	34	Urban	13	96.87
	<i>A10</i>	33	Urban	91	60.46
	<i>A12</i>	19	Urban	21	93.62
	<i>A13</i>	13	Urban	74	80.7
	<i>A14</i>	23	Urban	78	77.27
	<i>A18</i>	17	Urban	98	64.11
	<i>A20</i>	20	Urban	99	74.19
	<i>A21</i>	24	Urban	85	67.31
<i>B</i>	<i>B1</i>	56	Urban	13	94.12
	<i>B2</i>	60	Urban	13	95.45
	<i>B3</i>	37	Urban	23	95.46
	<i>B4</i>	34	Urban	41	88.34
	<i>B5</i>	49	Urban	18	92.43
	<i>B6</i>	33	Urban	20	96.61
<i>C</i>	<i>C1</i>	63	Urban	19	98.09
	<i>C2</i>	37	Urban	12	77.89
	<i>C3</i>	62	Urban	14	82.43
	<i>C5</i>	45	Urban	16	94.44
	<i>C6</i>	31	Urban	51	80.85
	<i>C7</i>	62	Urban	14	85.72
	<i>C8</i>	40	Urban	15	92.86
	<i>C9</i>	22	Rural	18	100
	<i>C10</i>	41	Urban	19	93.46
	<i>C11</i>	12	Urban	19	97.62
	<i>D</i>	<i>D1</i>	22	Rural	62
<i>D2</i>		18	Rural	57	97.62

APPENDIX C

IRB APPROVAL AND REQUEST TO PARTICIPATE

The University of Alabama
Human Research Protection Program
Consent to Participate in a Research Study
University of Alabama Institutional Review Board

Title of Research: The effects of collegial principal leadership on student achievement

Investigator: Raymona King Bevel

Title The effects of collegial principal leadership on student achievement

Researcher

Raymona King Bevel, a doctoral student at the University of Alabama

Purpose

With the increased demands of schools to provide high levels of educational rigor and expectations for all learners, it is essential to determine the effect of the school principal in providing instructional leadership to establish and maintain effective student achievement. The purpose of this study is to determine the effects of collegial principal leadership on school climate and trust then ultimately on student achievement.

The researcher hopes that this study will add to the existing body of knowledge in the area of effective leadership practices and assist schools in their efforts to improve. The traditional methods of school leadership are less appropriate for schools since the arrival of NCLB which increased emphasis on standards based testing. Today's economy requires schools to prepare students for success in a global labor market. This study will provide data that will allow for more informed decision making by administrative preparation programs and school system staff development programs. Research based practices are vital to establish partnerships between

principals, teachers, students, and the community to assist poor performing schools in their efforts to improve. Moreover, it will contribute to professional knowledge on successful school leadership.

Participants

This study will include teachers (age 19 and above) in four school districts in North Alabama who teach in an elementary school with a K-5 or K-6 configuration whose principal has been in place for a minimum of 3 years. Participants will be asked to complete the School Academic Optimism Scale. Control variables include whether schools are rural or urban, their size in terms of student population, and socio-economic status. This information will be compared to reading scores from the 2008 administration of the Alabama Reading and Mathematics Test (ARMT) using a correlation analysis and ordinary least squares multiple regression analysis. The survey can be completed in less than 7 minutes. The survey is anonymous and there is no cost. Privacy will be protected in all written and published data.

Prospect Initials _____

Benefits and Risks:

It is the hope of the researcher to determine the following: Is there a direct relationship between collegial principal leadership and positive school climate? Is there a positive correlation between collegial principal leadership and student achievement? No specific participant information will be gathered. Participants do not have to answer any question or provide any information they choose not to. There are no foreseeable risks involved for participation in this study.

Participation is on a voluntary basis.

Questions:

Direct questions or concerns to Raymona Bevel at 256-572-0924 / raymona08@gmail.com or Dr. Daisy Arredondo Rucinski at 205-348- 7826 / darredo@bamaed.ua.edu

If you have questions about your rights as a study participant, or are dissatisfied at any time with any aspect of the study you may contact Tanta Myles, anonymously if preferred, at the Administrative Panels Office, University, University, CA (USA) 94305-5410 (or by phone (650) 723-2480-you may call collect).

Additional information:

Participants do not give up any legal rights by signing this consent form.

Participants will be given a copy of this consent form to keep in case they want to review it later or for contact information about the investigator or the university about the study.

The University of Alabama Institutional Review Board (IRB) is the committee that protects the rights of people in research studies.

Prospect Initials _____

The IRB may review study records from time to time to be sure that people in research studies are being treated fairly and the study is being carried out as planned.

I have read this consent form. I have had a chance to ask questions. My questions have been answered. I understand what I will be asked to do. I freely agree that I will take part in the study.

_____ Date _____
Signature of Research Participant

_____ Date _____
Signature of Investigator

Prospect Initials _____

APPENDIX D
LETTER TO SUPERINTENDENTS

April 23, 2009

To: Superintendent
Madison County Schools
Re: Dissertation Survey

Dear Sir,

I am working on my dissertation in Educational Administration at the University of Alabama. The title of my research is, *The effects of collegial principal leadership on student achievement*. As part of my research I am conducting an online survey using the School Academic Optimism Scale (SAOS). The SAOS measures the collective efficacy of the school, the faculty trust of parents and teachers, and the academic optimism of the school.

In a time when public education is in the political and economic spotlight, significant attention has been placed on the role of the school principal as an instructional leader. Research by Vodicka (2006) emphasized that accountability for proficiency of all students, regardless of socioeconomic status, gender, race, mental or physical disabilities, and ethnicity, falls to the schools and ultimately to the principal. This has created an interest in the effects a collegial principal has on student achievement, taking into consideration the variables of climate and trust. (Hoy & Tarter, 1988; Ibtesam, 2005; Kottkamp, 1991; Smith, 2007; Kitsantas & Ware, 2007; Lumpa, Whitaker, & Whitaker, 2000)

In addition to the need to educate students who can compete in a global economy, principals are faced with challenges presented by the *No Child Left Behind Act 2002* (No Child Left Behind, 2002) legislation to ensure all students are proficient by 2014. Research has been conducted on instructional or teaching skills, climate, and socioeconomic conditions as they apply to student achievement.

This research will examine the effects of collegial principal leadership on student achievement by asking the following research questions: Is there a direct relationship between collegial leadership and positive school climate? Is there a positive correlation between collegial principal leadership and student achievement? There will be two levels of analysis. Level I will involve Correlational Analysis that will test the relationship between her predictor variables, control variables and outcome variables. Level II will be a set of multiple regression analyses that will test the effects of collegial principal leadership on school climate and student achievement. The research sample will include teachers in schools with a kindergarten or first grade through sixth grade configuration. In addition, only schools where the principal has been in place for 3 years will be included. Test scores from the Alabama Reading and Mathematics Test 2008 for fifth grade students will be used to measure academic achievement. Expected timeline for completion of the surveys is the end of May with data analyzed in June.

Thank you for your consideration and your assistance. I have included contact information for both myself and my committee chair at the University of Alabama.

Sincerely,

Raymona Bevel

Note about research

Due to the lack of complete data from the SAOS it was determined by the researcher to use the data to support research questions on academic optimism. It was determined by the dissertation committee that a new IRB was not required.