

The Impact of NCLB Designations on Learning Environments

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## The Impact of NCLB Designations on Learning Environments

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## **Dedication**

In recognition of the blood that runs through my veins, I dedicate my dissertation and doctorate degree to my parents, Russell and Bernadine Stephenson. I sincerely thank you for the determination, commitment, and perseverance that you instilled in me from birth. As a loving father and husband, I hope to instill the same values that have resulted in my success, within my children, Bryce, Justin, and Grant Stephenson.

The completion of this dissertation signifies triumph over all who have ever questioned my intellectual capacity. I have dedicated my life to help those who may occupy a disenfranchised class; however, my commitment and association with the “common man” should not be confused with substandard academic abilities. One will never achieve liberation until we all achieve victory.

## **Acknowledgments**

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## **Abstract of Dissertation**

### The Impact of NCLB Designations on Learning Environments

The goal of the No Child Left Behind Act of 2001 (NCLB) is for all students to become proficient in reading and mathematics by 2014. According to current research, no states are on track to achieve this goal set forth by NCLB (Rebel & Wolff, 2008). As a result of schools failing to meet their academic targets on standardized tests, the United States Department of Education imposes sanctions on schools. This dissertation will analyze the impact of NCLB designations on the quality of school learning environments.

This quantitative study was based in an urban public school system located in the Mid-Atlantic States. To conduct the study, the researcher collected data from six elementary schools. The six schools were classified into three equal groups. The first group consisted of two schools without NCLB sanctions (Not in Needs of Improvement). A second group consisted of two schools in Corrective Action. A third group consisted of two schools in Restructuring status. To collect the data, the researcher surveyed the teachers from each school. The survey also included one open-ended question. To measure the learning environment of the each school, four domains were used as focal points including academic expectations, communication, engagement, and safety. The researcher aggregated items in each domain to determine the total score. For each domain, the results of the surveys were compared between groups to determine the levels of significance. The responses from the open-ended question were coded for common themes. The researcher made conclusions based on the results of the survey. The researcher used Valencia's Deficit Theory (1997) to serve as the theoretical framework for the study.

Based on the researcher's hypothesis, there were to be statistically significant differences in teachers' perceptions of learning environments given the school's NCLB status. Of the four domains, NCLB designations resulted in significant differences in two, communication and engagement. When comparing the schools' academic expectations and safety responses, significant differences were not discovered based on schools' NCLB designations. The open-ended question resulted in common themes among the teachers in schools with the same NCLB status.

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## Chapter I

### Introduction

The American education system is based on the premise that all students are entitled to an equal education (Elementary and Secondary Education Act, 1965). Even with segregated schools during the period of reconstruction, the landmark case of *Plessy v. Ferguson* (1896) determined the constitutionality of racial segregation in public accommodations, including schools. Even though racial segregation existed within schools, the doctrine of “separate but equal” served as the foundation for the case.

In 1954, the United States Supreme Court decided in the case of *Brown v. Board of Education of Topeka* that state laws establishing separate public schools for Black and White students denied Black children equal educational opportunities. This landmark decision overturned earlier rulings such as *Plessy v. Ferguson* (1896), by declaring state laws, which established separate public schools for Black and White students, unconstitutional. As a result of *Brown v. Board of Education* (1954), school districts across the country began to integrate.

In 1965, President Lyndon Johnson enacted the Elementary and Secondary Education Act (ESEA). The ESEA was the first and largest comprehensive federal education law to provide substantial monetary funds for kindergarten through 12<sup>th</sup>-grade education. According to ESEA, funds are authorized for educators’ professional development, instructional materials, resources to support educational programs, and the promotion of parental involvement. ESEA was originally authorized through 1970; however, the government has reauthorized the ESEA every 5 years since its enactment. Since its inception, the basic premise of the law remains: providing targeted resources to

ensure that disadvantaged students have access to a quality public education (ESEA, 1965).

The most recent reauthorization of ESEA (1965) was the No Child Left Behind Act of 2001 (NCLB, 2002). NCLB is rooted in standards-based educational reform. NCLB requires that states develop standardized assessments in basic skills to be administered to students in specified grades. School funding (federal) is dependent upon students' performance on the standardized tests. Under NCLB, school systems are required to report the academic achievement for all students. NCLB has created subgroups to specifically measure the progress of all students. These subgroups include White, African American, Latino, Asian or Pacific Islander, American Indian, limited English proficient (LEP), socioeconomic status (based upon students' eligibility for free or reduced-priced meals), and special education.

The goal of NCLB is to guarantee that all students are proficient in reading and mathematics by year 2014 (NCLB, 2002). NCLB was implemented to increase accountability and student achievement. NCLB is designed to reward schools and school districts that show progress while penalizing schools and districts that fail to show academic growth. The NCLB document states, "Schools and states that make significant progress in closing the achievement gap will be honored with awards from a No Child Left Behind school bonus fund and an Achievement in Education state bonus fund" (NCLB, p.9). Schools that fail to show growth are subjected to sanctions that become more severe with each failing year. According to NCLB, schools must meet academic targets defined as Adequate Yearly Progress (AYP). If a school fails to make AYP for 5 years, the school district has the option to close the persistently failing school.

## **Overview**

The purpose of this study was to examine teachers' perceptions of the learning environments at six public schools, with differing NCLB statuses, located in an urban school district in the mid-Atlantic region of the United States. NCLB was established to ensure that all students would be proficient in math and reading by 2014. NCLB requires school districts to create a plan to guarantee all students will be proficient by 2014. States were required to determine the standardized test to provide baseline data for proficiency. According to NCLB, states need to provide support ("targeted assistance") to schools that fail to meet their academic targets (AYP). If a school continues to fail to meet its academic target, further sanctions are taken against the school. Sanctions include, but are not limited to, funding deprivation, change of governance structure, or school closure.

Staff perceptions play a critical role in the success of a school. As stipulated by the NCLB Act of 2001, every school's academic status is public information. Armed with this knowledge, stakeholders make judgments about the school. Even though a school historically may have provided an adequate education to generations of students, the implication of a school in "restructuring" status can possibly have an adverse effect on the mindsets of various stakeholders, including parents, students (past, present, and potential), teachers (current and potential), and administrators (current and potential). With NCLB's basing a school's academic status on a single indicator, an annual standardized test, the actual success of the school may not be accurately represented by its NCLB status. This research was designed to examine teachers' perceptions of their respective schools' learning environments and determine whether their perceptions varied

according to school NCLB status.

### **Statement of the Research Problem**

NCLB requires school systems to disaggregate data based on subgroups. These subgroups include White, African American, Latino, Asian or Pacific Islander, American Indian, limited English proficiency (LEP), socioeconomic status (based upon students' eligibility for free or reduced-priced meals), and special education. A disproportionate number of failing schools are located in urban neighborhoods (Klebanov, Brooks-Gunn & Duncan, 1994). This study examined six public schools located in an urban school district.

Urban schools are particularly impacted by NCLB sanctions. For example, in one urban public school system in school year 2007-2008, only two of 11 middle or junior high schools performed well enough to achieve "receiving school" status. Therefore, students in "failing" schools had only two possible schools into which they could transfer. The small number of receiving schools cannot absorb all of the students from failing schools, based on capacity alone. Without options, students are forced to remain in failing schools. Staff who work in underperforming schools not only have to overcome the obstacles associated with teaching in an urban environment but also must overcome the public's perception that the school is failing. Examining teachers' perceptions of learning environments and how they may differ based on NCLB status was important. The impact of sanctions provided insight into untold effects of NCLB on teachers.

### **Statement of Potential Significance and Research Question**

Since 2001, NCLB has played a major role in driving educational policies in school systems throughout the country. It is important to understand not only the reasons behind the legislation and the potential affects on student achievement but also the ways in which NCLB may affect how teachers perceive the learning environment at their schools. This study used the following research question as its focus:

1. To what extent is there a difference in teachers' perceptions of learning environments at six public schools, with differing NCLB statuses, located in an urban school district?

### **Theoretical Foundation**

Deficit theory served as the theoretical perspective for the research. According to deficit theory, people have the tendency to blame the internal whole or components of an organization for its faults, without considering external factors (Valencia, 1997). When applied to this research, deficit theory suggests that school placement in restructuring status is a reflection of the work of the school as a whole and school staff in particular. Specifically, if a school is placed in restructuring status, teachers who work in that school will possess negative perceptions regarding the learning environment of their school. Even though the United States Department of Education and the United States Government fail to adequately support school systems in satisfying legislated mandates, schools are ultimately held accountable by being labeled as failing (Rebell & Wolf, 2008). On the contrary, if a school is classified as a school "not in need of improvement," the staff is likely to have positive perception regarding the learning environment of the school. This study provided an opportunity for school staff to state

their perceptions of their respective schools' learning environments.

### **Summary of Methodology**

The methodology for this study was nonexperimental, causal-comparative. To effectively address the research question, the researcher used a survey to collect data. The 2008 Learning Environment Survey adapted from the New York City Public Schools was distributed to teachers at six public schools in an urban school district. The schools were equally distributed into three categories, based on NCLB status. The survey results provided detailed teacher perceptions regarding their schools' learning environments. This information served as the basis for a description of each school as well as a statistical comparison of the perceptions of the learning environment of the schools within the three groups. Of the six schools, two were labeled as Restructuring (failure to meet AYP for 5 years)—the most severe label. The NCLB status of the second pair of schools was Corrective Action (failure to meet AYP for 3 years)—a label that is less severe than restructuring. The third pair of schools had not experienced sanctions and was labeled as Not in Need of Improvement according to NCLB. The differing NCLB statuses provided a basis for contrast.

### **Limitations**

When recruiting schools for this study, the researcher made every effort to obtain six demographically similar schools in that the largest difference between the schools was NCLB status. Even though the schools were demographically similar, there were differences between the six staff and student populations that cannot be accounted for, simply because the populations were located in different schools. As a result, some differences between the schools were not accounted for in the analysis.

This study was limited to six schools located in an urban school district in the mid-Atlantic region of the United States. The socioeconomic status of the families of the students attending these schools was low. In addition, the student populations at the six schools were overwhelmingly African American. Although the racial demographics are typical of schools located in urban neighborhoods, the generalizability of these findings may be limited.

### **Definition of Terms**

**Adequate Yearly Progress (AYP):** measurement defined by the No Child Left Behind Act that allows the United States Department of Education to determine how every public school and school district in the country is performing academically.

**Elementary and Secondary Education Act (ESEA):** a United States federal statute enacted April 11, 1965. The statute provides funds for professional development, instructional materials, resources to support educational programs, and promotion of parental involvement.

**Free and Reduced-Meal Students (FARM):** students who receive free or reduced-price lunch. This factor generally serves as an indicator of the socioeconomic status of the school

**Limited English Proficiency:** a subgroup of the NCLB Act of 2001

**No Child Left Behind:** Public Law 107-110, federal program aimed at improving the performance of United States primary and secondary schools by increasing the standards of accountability for states, school districts, and schools

**Proficient:** the minimum academic performance target for achieving adequate yearly progress

**Receiving school:** school to which students who attend schools that fail to make AYP for 2 consecutive years have the option of transferring, according to the NCLB Act of 2001

**Sending school:** school from which students who attend schools that fail to make AYP for 2 consecutive years have the option of transferring, according to the NCLB Act of 2001

**Student mobility:** descriptor of a condition in which students move to two or more schools within 1 or 2 school years

## Chapter II

### Critical Literature Review

In 2001, Congress approved the No Child Left Behind Act of 2001 (NCLB), an educational reform initiative designed to increase the “accountability for student performance” (NCLB, 2002, p. 2). President George W. Bush, in conjunction with numerous Democrats and members of the Republican majority, developed this federal legislation in response to the abysmal outcomes of student performance over 5 years. NCLB requires annual standardized testing assessments to be conducted in science, mathematics, and reading for all public school students in grades three through eight. The rationale behind annual assessments is to provide teachers, parents, and policymakers with quantifiable academic data on every child.

The goal of NCLB is to guarantee that all students are proficient in reading and mathematics by year 2014. According to the precepts of the legislation, each state is required to create or adopt a standardized assessment system to accurately gauge student growth. Students in schools are expected to achieve academic targets every school year. This target is defined as Adequate Yearly Progress (AYP). As stated under NCLB, schools and school districts are rewarded for making AYP but “may lose funds if performance goals are not met” (NCLB, 2002, p. 3).

NCLB guidelines contain regulations that focus specifically on achievement gaps between various subgroups. When reporting annual standardized testing results, states are required to publish a public report disaggregated by race, gender, English language proficiency, disability, and socioeconomic status (NCLB, 2002). To hold schools

accountable for educating all students, the failure of any one subgroup to make AYP results in the entire school's not making AYP. When a school persistently fails to achieve AYP, students are given the option to transfer to a school that made AYP.

NCLB was implemented to increase accountability and student achievement. The educational act is designed to reward schools and school districts that show progress while penalizing schools and districts that fail to show academic growth. The NCLB documents states, "Schools and states that make significant progress in closing the achievement gap will be honored with awards from a No Child Left Behind school bonus fund and an Achievement in Education state bonus fund" (NCLB, 2002, p. 9). Schools that fail to show growth are subjected to sanctions that become more severe with each failing year. After 5 years of failing to make AYP, school districts are given the option to close persistently failing schools.

Standardized tests have determined several achievement gaps between various racial and socioeconomic groups. This research measured teachers' perceptions related to the learning environment in schools with differing NCLB statuses. Although the researcher examined only six schools, the demographics were consistent with many urban schools throughout the country. Gaining an understanding of the impact of NCLB's sanctions on learning environments may result in the creation of policies to effectively meet the needs of all schools.

### **Research Related to Standardized Tests**

NCLB is designed to increase the levels of accountability of educators. In accordance with NCLB, the United States Department of Education assesses students' growth based on their performance on standardized tests. Due to sanctions imposed for

not demonstrating academic growth, it is in the best interest of school districts and schools to meet AYP. Due to the importance of student performance on standardized tests, educators tailor their instructional programs to maximize students' performance on the state assessment examinations (Abrams, Pedulla, & Madaus, 2003; Stecher & Barron, 2001). According to NCLB, performance on standardized tests plays a critical role in the future of a school.

In 2001, Stecher and Barron conducted a mixed-methods study to examine the impact of a particular form of high-stakes testing, called milepost testing. Milepost testing refers to schools that administer standardized tests to selected grades. In Kentucky during school year 1997-1998, the milepost grades were Grades 4, 5, and 7. Teachers from Grade 6, a nontested grade, were also interviewed. Stecher and Barron's study examined the differences in practice between Grades 4, 5, and 7 and Grade 6. The study, which was based in a school district in Kentucky, was conducted over a period of 2 years. To understand the impact of standardized tests on the behavior of classroom teachers, the practices and behaviors of teachers were assessed via surveys. The research was conducted in 72 elementary schools and 80 middle schools. The response rate of the teachers who participated in the survey was 54% ( $n = 887$ ). The surveys focused on four areas including professional development, allocation of time by subject in self-contained classrooms, mathematics curriculum and instruction, and writing curriculum and instruction. The data collection instruments included three-, four-, and five-point Likert scales, yes or no questions, and open-ended questions. The findings indicated that there was an insignificant difference in the amount of time spent by testing and nontesting grade teachers on professional development activities. Teachers of testing Grades 4, 5,

and 7 spent slightly more time (69.1, 64.4, and 65.4 hours, respectively) than teachers of the nontesting Grade 6 (57.6 hours). On the contrary, teachers in testing grades spent significantly more time with regard to time by subject ( $p < .05$ ). Comparison of the number of hours that fourth- and fifth-grade teachers spent focusing on subjects in testing versus nontesting grades revealed a significant difference for writing (96 and 84 hours, respectively) and science (50 and 28 hours). Comparison of the same grades revealed no significant difference in reading (38 and 42 hours). With regard to mathematics, which is tested in the fifth grade, versus social studies, which is not tested in the fifth grade, teachers spent 60% more time (5.6 hours per week versus 3.5 hours per week) focusing on mathematics. Based on  $p < .05$ , this finding was significant. The study did not specify the district used as the sample in the study; however, the study supported the notion that standardized tests impact the behavior of teachers.

The applicability of the study could be increased if the type of school district (urban, rural, or suburban) were identified. Whereas the study was thorough, an analysis of the race of students and teachers could strengthen the study. This study contributes to the current research by highlighting the changes in instructional behaviors in teachers who are required to prepare students for standardized examinations. Research including examination of the role of teachers supports the notion that the current system of accountability impacts the instructional program of teachers.

Examination of the influence of standardized testing on the behaviors of teachers indicates that the learning environment will be impacted by the tailored instructional focus of the teachers. As a part of the questionnaire in the current study, teachers were asked to respond to questions regarding the instructional focus within their respective

schools. Stecher and Barron's research (2001) may serve as a foundation for teachers' beliefs and behaviors within their own classrooms.

In 2003, Abrams et al. conducted a qualitative study examining teachers' perceptions of state-mandated testing programs. To assess teachers' perceptions, researchers used surveys to collect data on teachers in high-stakes and low-stakes testing states. High-stakes states included Alabama, California, Delaware, Florida, Georgia, Indiana, Louisiana, Maryland, Massachusetts, Mississippi, Nevada, New Jersey, New Mexico, New York, North Carolina, South Carolina, Tennessee, Texas, and Virginia. Low-stakes states are Hawaii, Maine, Montana, Nebraska, New Hampshire, North Dakota, Utah, and Wyoming. States were classified as high-stakes states when serious sanctions were imposed for students' not showing academic progress on standardized tests. Low-stakes states did not have sanctions imposed for students' lackluster academic performance on standardized tests. Researchers collected data using an 80-item survey. The surveys, based on a four-point Likert scale, focused on four areas including the impact on classroom instruction and assessment, pressure to raise test scores and prepare students for the state test, impact of teacher and student motivation and morale, and views on accountability. Researchers failed to provide information regarding the percentage of people who responded to the survey; however, the sample population of 200 respondents served as a strength for this study. The racial demographics of teachers included 5% African American, 3% Asian, 4% Hispanic, and 88% White. One half of the teachers taught in socioeconomically disadvantaged schools, whereas the remaining 50% taught in socioeconomically advantaged schools. The sample population was drawn from elementary, middle, and high schools. In agreement with Stecher and Barron's (2001)

research, the findings indicated that 43% of high-stakes states put more emphasis on content matter covered on standardized tests. Teachers in high-stakes states reported significant decreases in time spent on instruction in the fine arts and vocational education. With regard to personal values on education, 76% of high-stakes teachers and 63% of low-stakes teachers reported that their state testing program led them to teach in ways that contradict their own beliefs regarding sound educational practice (Abrams et al.).

According to the results of research by Stecher and Barron in 2001 and Abrams et al. in 2003, teachers react to the increased pressure created by high-stakes testing by teaching test-taking skills, modeling classroom assessments, and emphasizing content that is tested. The current study supported the idea of teacher behaviors' being impacted by the increased level of accountability generated by standardized tests. In 2003, NCLB accountability systems were relatively new to the field of education; however, with sanctions now being imposed on nonperforming schools across the country, the idea of low-stakes testing does not exist. Based on the study by Abrams et al., the high-stakes testing is more reflective of the current state of education. With regard to the current research, the study by Abrams et al. provided a basis for the mindset of current educators as they navigate through the educational terrain of NCLB.

As stated within the study by Abrams et al. (2003), the high levels of accountability for achieving AYP were not consistently present throughout the country. The influence on classroom instruction and assessment, the pressure to raise test scores and prepare students for the state test, the effects on teacher and student motivation and morale, and views on accountability are all factors that inevitably impact the classroom learning environment. With the critical importance of meeting today's NCLB strict

standards, the prior study may provide insight into the current conditions within schools. The current study examined the impact of NCLB sanctions in an environment where accountability is consistently high throughout the country.

In 2003, Mintrop conducted case studies of 11 schools labeled low performing by the state accountability systems of Maryland and Kentucky. The seven Maryland schools and four Kentucky schools were selected according to district type, duration in the program, educational load, and performance history. All selected schools served populations with high proportions of students eligible for the free or reduced-price lunch program. In each state, about half of the selected schools were middle schools; half were elementary schools. The study examined the motivation level of schools determined to be functioning at their lowest level, thereby resulting in the highest levels of state-imposed sanctions. Over a 2-year period from 1998 to 2000, each school was visited numerous times by at least two researchers. The case studies were conducted via classroom interviews, classroom observations, meeting observations, and survey questionnaires. The database for each Maryland case typically consisted of a survey and a minimum of 21 formal, semistructured interviews, as well as six classroom observations per school. In Kentucky schools, the researchers interviewed slightly fewer teachers and observed fewer classrooms. Interviews were conducted using standardizing protocols; they were transcribed and coded with the help of NUDIST. In Maryland, 30 classroom visits were conducted, whereas 15 classroom visits were conducted in Kentucky. With only 15 classroom visits' being conducted in Kentucky, versus 30 in Maryland, the credibility of the data may have been compromised. Interviews were conducted with teachers of all subjects, administrators, instructional specialists, and other

resource teachers. As a part of the study, teachers were expected to complete a 250-item survey. Across both states, the response rate was 53% ( $n = 541$ ). The study showed that putting schools on academic probation served as weak motivation to teachers because they perceived the assessments as largely unfair, invalid, and unrealistic. Even though educators altered their practices as a result of pressure and fear of sanctions (Abrams et al., 2003), Mintrop concluded that academic probation serves as a weak motivator for teachers to improve their instructional program. In 2003, academic probation was similar to the NCLB restructuring that is currently being experienced by many school districts. Mintrop's study contributed to the current study by examining the impact of an imposed sanction on the practices of a teacher.

The teacher's classroom is critical in supporting the healthy learning environment of a school. Mintrop's (2003) study examined the level of influence of the sanctions on teachers with regard to motivation. By explaining the impact of sanctions on teacher behaviors, Mintrop's study contributed to the current study of the impact of NCLB sanctions and their impact on learning environments. The degree of the impact of sanctions on teacher behaviors may impact the learning environments within schools.

The NCLB Act was created to provide support in the country's attempts to ensure student proficiency by 2014. Because standardized exams are used as the single indicator of academic growth, educators understand the importance of adequately preparing students for the tests. In an attempt to achieve the academic targets, teachers have been altering their instructional practices by focusing on the content covered on standardized examinations (Abrams et al., 2003; Stecher & Barron, 2001). With sanctions serving as a motivating factor, researchers have showed that teachers are only weakly motivated by

the threat of consequences (Mintrop, 2003). Standardized tests play a critical role in the implementation and execution of the No Child Left Behind Act of 2001. This research examined the impact of NCLB sanctions, imposed for failing to perform on high-stakes examinations, on the learning environment within schools.

### **Literature Related to Learning Environment**

The environment of a school plays a critical role in student achievement (Gruenart, 2005). With regard to a staff's delivering a quality education to students, the learning environment must be conducive to nurturing academic success. The staff and students within the school must demonstrate behaviors that support the healthy learning environment of a school. Heckman (1993) defined school culture as the commonly held beliefs of teachers, students, and principals. This section of literature examines the importance of various learning environments within schools.

In 2005, Gruenart conducted a quantitative study to investigate the salience of collaborative cultures relative to student achievement. Through the use of surveys, the researcher focused on six factors. These factors were correlated with student achievement to determine whether or not features of collaborative cultures had a tendency to exist where high test scores were reported.

The Gruenart (2005) study was based in the State of Indiana. The 35-item survey focused on school improvement, effectiveness, culture, climate, and administrators. The survey was administered during the spring semester of the 2002-2003 school year. The researcher distributed 4,350 surveys, of which 2,750 were returned; the return rate for the surveys was approximately 63%. Multiple levels of schools were surveyed including 35 elementary schools, 18 middle schools, and 28 high schools. Staff from the elementary

schools returned 92 surveys, whereas staff from the middle and high schools returned 481 and 1,327 surveys, respectively. The factors from the survey were used as correlates with math and language arts student achievement data from the Indiana Statewide Testing for Educational Progress (ISTEP) scores for 2003. The author found that professional development, collaborative cultures, and the staff's relationship with parents impacted academic achievement on the ISTEP.

Based on the fact that the current researcher used a survey to examine the learning environments of multiple schools, Gruenart's (2005) study contributed to the current research. The study was deficient due to the fact that tables were not included to display the results. In addition, the researcher did not state the alpha levels to determine the levels of significance. Although collaborative cultures were said to improve academic achievement at all levels (Gruenart), the extent of the correlations between school culture and ISTEP scores were never specifically stated in the study.

Gruenart's (2005) study developed a correlation between healthy school cultures and academic achievement. The current study, based on level of NCLB sanction, also attempted to determine the correlation between learning environment and student achievement. Although the current study examined schoolwide levels of academic achievement, Gruenart's study provided a foundation for further examination. The next study examined different indicators that contribute to school culture or learning environment.

In 2007, Chen developed a school safety and student achievement model by incorporating the concepts of student background, school structure, school culture, and school disorder. Use of the structural equations model accounted for 71% of school

variance in student achievement. The researcher examined 613 elementary schools in New York City.

The data for Chen's (2007) study were obtained from the New York City Department of Education via the Institute for Education and Social Policy of New York University. To address the causal links among the study variables, two consecutive years of school-level data, 2002-2003 and 2003-2004, were obtained. The data from the 2002-2003 school year were used to build the initial school disorder model, and the 2003-2004 school mean standard testing data were used to test the causal link between school disorder and student achievement in a 1-year timeframe.

The variables used in the study included academic achievement, school disorder, school climate, school size and student attendance, and student background. Structural equation models (SEM) were selected and employed as the main analytical techniques for the study. The researcher used two statistical software packages for his analysis. SPSS was used to conduct descriptive and bivariate analyses; descriptive statistics were used to present the study variables.

The school disorder and student achievement model fit the New York City elementary school data well. The *p*-value of the chi-square test statistic for the overall model was .16, suggesting a good model fit. The model explained the variability of the study variables well. It accounted for 71% of variance in student achievement as measured by state Grade 4 language arts and mathematics standardized test scores. It also accounted for 45% of the variance in student attendance rate and 24% of the variance in school disorder as mediating factors.

The study found a direct correlation between the level of poverty in a school and

its measure of school disorder: the higher the level of student poverty, the higher the measure of school disorder. In addition, poverty level had an adverse impact on academic achievement. Student attendance rate also affected student achievement; the higher the average percentage of days that students attended school, the higher the mean test scores in language arts and math. School disorder affected student achievement directly and indirectly through student attendance rate.

Chen's (2007) study was critical in determining the extent to which various factors impacted academic achievement. The study supported the notion of a negative impact of school disorder on student achievement. With numerous variables contributing to school disorder, Chen's study determined the extent to which factors impacted academic achievement. With regard to the current study, Chen's research provided a framework through which to view school environments and their impact on student achievement. By using a four-point Likert scale, the current research examined the learning environment of six schools impacted by NCLB sanctions. Chen's examination of school environments supported the notion of various factors' impacting the learning environments of schools.

In 1999, Esposito conducted a study to investigate the relationship between school climate and children's academic and social development in the early elementary school years. The study focused on minority students from low-income families, located in chronically poor neighborhoods. Specifically, participants for the study participated in the school district's Head Start program.

Esposito's (1999) study included five research questions: (a) What is the relationship between the parents' perception of school climate and children's academic

and social outcomes? (b) How much of the variance in children's outcomes can be attributed to school climate, controlling for other important family-related factors? (c) How does this relationship change during the first three years of elementary school? (d) Are there specific aspects of perceived school climate that relate to children's outcomes? and (e) Does the relationship of these factors to children's outcomes change during the first 3 years of elementary school? This research was based in a northeastern urban center with a population of approximately 80,000.

The data were collected from the students and parents over a 3-year period. The sample size for the students' kindergarten year was 189; the first-grade and second-grade sample sizes were 172 and 152, respectively. During their kindergarten year, the children attended 15 schools within the city limits and were placed within 40 different classrooms. During their second-grade year, children were attending schools in 60 different classrooms. The researcher used questionnaires to gather data from the children's teachers; data were gathered from parents and students via surveys.

The researcher concluded that overall school climate is related to parents' ratings of their children's school adjustment for all 3 years (kindergarten  $r = .24, p < .000$ ; first grade  $r = .38, p < .000$ ; second grade  $r = .33, p < .000$ ). Overall school climate was not significantly related to the kindergarten or second-grade teachers' ratings of children's academic competence; however, the teacher-student relationship was significantly related for all 3 years (kindergarten  $r = .18, p < .03$ , first grade  $r = .19, p < .04$ , second grade  $r = .19, p < .05$ ). School climate was moderately correlated to first-grade academic competence ( $r = .19, p < .04$ ).

This research supported the relationship between school climate and children's

academic and social development. The findings provided a basis for the study of parents' perceptions regarding a school's impact on the performance of students (Esposito, 1999). With regard to the labeling of schools set forth by NCLB, this study examined the impact of school climate on the academic achievement.

As did other researchers, Esposito (1999) concluded that healthy student–teacher relationships play a major role in improving student achievement (Gruenart, 2005; Rodriguez, 2008). In the current research, the level of communication between students and teachers was assessed. Esposito's research provided a basis for the importance of healthy relationships within schools, especially for children in early childhood grades. Although relationships served as only a fraction of the learning environment survey, Esposito (1999) concluded that it plays a critical role in developing a strong school culture.

In 2008, Rodriguez conducted a case study examining how relationships are connected to school culture. The nature of the student–adult relationship was examined by exploring how students experienced personalized, respectful, and encouraging interactions with school adults. In his study, Gruenart (2005) had determined the importance of developing a collaborative relationship among colleagues; Rodriguez explored the relevance of relationships between students and adults.

In Rodriguez's (2008) research, the case study was employed to gain an understanding of the school cultures. The researcher selected two high schools to participate in the study. The project was a multischool study examining the relationships among school structure, culture, and student achievement. The participating schools were given pseudonyms: Grand High School (GHS) and High Achieving Academy

(HAA). The study was conducted from 2001 to 2003 in a northeastern city in the United States. The researchers analyzed students' perspectives and experiences as they related to school culture.

The researcher purposely selected 10 students from each school; students were selected based on student achievement data. Using test scores and grade point averages, the researcher selected students considered to be low, medium, and high achievers. This procedure avoided the overrepresentation or underrepresentation of students within a single category.

To gain an understanding of school culture from the perspective of the students, Rodriguez (2008) conducted semistructured interviews and participant observations. Each participant was interviewed three times. Each interview was audio recorded and subsequently transcribed. The interviews explored students' feelings regarding school. In addition, all participants were observed in classroom and nonclassroom contexts, including transition time between classes, the cafeteria during lunchtime, and fieldtrips. Particular attention was paid to how students responded to academic work, disciplinary policies, relationships with peers and school adults, and other dimensions of school life.

The interview transcripts and field note data were uploaded into ATLAS.ti. The researcher conducted his transcript analysis using open coding. This coding process enabled the researcher to compare and contrast cases both within and across schools. Running code lists were also created to support the categorizing of information and contextualizing of analytical strategies.

The findings were categorized into three dimensions of personalization including the personal feel of relationships, the role of respect, and how a healthy balance of

encouragement and support effectively serves students' needs. Personalized relationships, based on students' feedback, significantly influenced the student experience across schools (Rodriguez, 2008). The students across both schools considered respect to play a vital role in creating personalized relationships. Personalized experiences also emerged in the school's ability to foster structures of support as a function of relationships between students and adults. The findings included thick and rich descriptions that provided evidence of the claims being made.

As did previous studies (Esposito, 1999; Gruenart, 2005), Rodriguez's (2008) study focused on the importance of relationships in developing a strong school culture. His research contributed to the current study by reemphasizing the importance of relationships and communications with regard to developing a healthy school culture.

In 2003, Lee and Burkam conducted a study to explore how high schools, through their structures and organization, may influence students' decisions to stay in or drop out of school. This longitudinal study was conducted in 30 urban and suburban high schools throughout the United States. The types of schools included public, private, and independent. To determine significance, the researchers applied multilevel methods to explore schools' influence on dropping out, taking into account students' academic and social backgrounds.

For this study, the researchers focused on three foundational elements of high school organization, including school structure (student populations), academic organization, and social organization. The researchers shared the belief that high schools, through their organizations, may either force out or hold in students whose personal characteristics might put them at risk of dropping out of high school. Lee and Burkam's

(2003) study focused on three research questions: (a) Within the students' high schools, which background factors are associated with the decision to drop out? (b) What features of high schools' structure, social organization, and academic organization are associated with dropping out? and (c) Is the influence of school social organization on dropout decisions contingent on school structure, and if so, what is the nature of the contingencies?

The sample for Lee and Burkam's (2003) study consisted of 3,840 students in 190 urban and suburban high schools from the High School Effectiveness Supplement of the National Educational Longitudinal Study of 1988. All of the sampled high school students were at the end of their 10<sup>th</sup>-grade year. Selected were 10<sup>th</sup>-grade students for whom data on race or ethnicity, gender, and SES were available. All schools in the sample reflected data on the constructs of interest to this study, specifically school size, school sector, curriculum information, and demographic composition. Lee and Burkam used longitudinal data including achievement test scores, high school transcripts, and survey information collected in 1990 and 1992.

The overall dropout rates for the entire sample of schools ranged from 0% to 50%, with a weighted mean of about 7%. Although gender was not significantly related to dropping out, race or ethnicity played a significant role. Compared to White students, Asian students were more likely to stay in school and African American students were more likely to drop out.

Academic background was also strongly associated with students' dropping out of school. Almost 18% of the dropouts took no academic courses in mathematics during the first 2 years of high school, whereas only 5% of nondropouts had taken no mathematics.

Students who eventually dropped out of school had lower school performance than nondropouts as measured by their grade point averages in mathematics. On a traditional four-point grade point average scale, the eventual dropouts had earned a grade point average below C, whereas the nondropouts' grade point average in mathematics was approximately C+.

With regard to the size of schools, dropping out is related to the size of the student population. Large schools, with between 1,500 and 2,500 students, reflected a higher proportion of students dropping out (12%) than did medium-sized schools (7%). The smallest schools, determined by student populations of fewer than 600 students, generated the lowest dropout rate (5%).

As did other studies (Esposito, 1999; Gruenart, 2005; Rodriguez, 2008), Lee and Burkam's (2003) study emphasized the importance of student-teacher relationships. Students attending schools defined by more positive relations were less likely to drop out than those who attended schools with less positive student-teacher relations. This phenomenon appeared to be consistent only in medium-sized public schools. Most private and independent schools had small populations, making it statistically less likely for students to drop out.

Based on the findings of this study, the school's structure, academic organization, and social organization all play a role in the success of a student. With academic course offerings' contributing to the academic achievement of a student (Lee & Burkam, 2003), it is important for educators to understand the impact of providing a diversified instructional program. Within schools, it is apparent that student-teacher relationships are critical in the academic and social development of their students (Gruenart, 2005; Lee

& Burkam). With this factor in mind, it is in schools' best interest to foster and nurture student-teacher relationships within schools.

Lee and Burkam's (2003) study took a comprehensive approach to analyzing school culture and its impact on students' success. Although the researchers were searching for factors that contributed to dropout rates, a student's making a decision to discontinue her or her schooling is indicative of a school that has failed to create a healthy school environment. As did Lee and Burkam's study, the current study also examined various factors including course offerings and relationships. In addition, the predominant race of students in the current research was African American. Even though the researcher did not compare various factors as they related to race, the race of students may have played a role in the findings in the current study.

In 2005, Westhuizen, Mosoge, Swanepoel, and Coetsee conducted a qualitative study on the organizational culture and academic achievement in secondary schools. The researchers examined high-, middle-, and low-performing schools to determine the common factors as they related to organizational culture. The researcher discovered common patterns among the various classes of schools.

The study by Westhuizen et al. (2005), based in South Africa, involved 341 secondary schools. The researchers used students' 12<sup>th</sup>-grade national examination results as a criterion for academic success. Based on the national examination results, the researchers created three classifications for schools: well-, average-, and poorly performing schools. From each classification, five schools were selected. At each school, data were collected from the principal and 25 randomly selected teachers. The researchers collected data via semistructured interviews and observations. The

researchers sought to find patterns in practices, beliefs, and behaviors as they related to the various classes of schools. The researchers separated the findings into two categories: intangible and tangible characteristics.

The findings related to the domain of intangible characteristics included school beliefs, philosophies, values, missions, and objectives. According to the findings, schools within each performance band reflected beliefs about their schools; although they varied, each school possessed specific beliefs. With regard to school philosophy, the high- and average-performing schools' philosophies emphasized academic achievement, holistic development, and respect. The low-performing schools demonstrated a lack of understanding of the real meaning of a school philosophy. The value system in high- and average-performing schools included academic achievement, order, discipline, and hard work, whereas poorly performing schools were characterized by declining value systems with minimal commonality to bind school members together. The high- and average-performing schools demonstrated a comprehensive understanding of the vision and mission of their respective schools. Educators within the poorly performing schools possessed very little knowledge regarding the vision of the school. In high-performing schools, strategic plans were readily available and actively implemented. Conversely, poorly performing schools did not include stakeholders in the creation of strategic plans and were unsuccessful in the implementation of the plans.

The findings related to tangible characteristics included school recognition ceremonies, curriculum, storytelling, involvement in management symbolism, and facilities. Regarding recognition, high- and average-performing schools consistently recognized school heroes via bulletin board displays, posters, and assembly programs.

Poorly performing schools demonstrated an organizational culture that did not give prominence to heroes of the school. The curriculum in average- and high-performing schools was diverse and served to engage students, whereas the culture of poorly performing schools was characterized by low levels of participation and low achievement. Interviews with staff from average- and high-performing schools revealed that storytelling was emphasized with great importance. Storytelling was not emphasized in poorly performing schools. Regarding school management, all average- and high-performing schools employed an inclusive approach to managing school discipline, policymaking decisions, and so forth. Conversely, poorly performing schools failed to include staff or community members in activities related to managing the schools. In high-performing schools, symbols such as the school flag, school slogans, and school badges that bind parents, educators, and learners were all visible. In average- and poorly performing schools, very little attention was paid to symbols. Although the facilities in all of the schools were erected at approximately the same time, it was clear that the facilities in the high- and average-performing schools were better maintained. It appeared that the staff took pride in maintaining the properties. In the poorly performing schools, the facilities had been neglected over long spans of time.

Westhuizen et al. (2005) provided empirical evidence linking the relationship between a healthy organizational culture and academic success of students. In this study, it was clear that both tangible and intangible elements were given high priority in schools that excelled, versus the virtual absence of these elements in schools that performed poorly. Whereas some researchers focused on the importance of teacher–student relationships (Gruenart, 2005; Rodriguez, 2008), Westhuizen et al. examined school

culture from a more comprehensive perspective, including 10 indicators that measure the health of a school's culture.

The current research was designed to examine three performance bands of schools. As did Westhuizen et al., the current researcher worked to identify common patterns among and between schools of the same performance bands. The research team of Westhuizen et al. provided support that common behaviors do exist between schools based on performance levels. Inevitably, learning environments are molded based on the behaviors of the teachers within the schools. The current research was designed to determine the extent to which NCLB labels affect learning environments within schools.

In 2008, Styron and Nyman examined student performance in middle school with a grade configuration of six through eight to determine effective middle school practices. The researchers focused their study on school climate, school health, and school practices. Using questionnaires to gather data, the researchers were able to determine common trends among the various types of schools. Specifically, this study examined student achievement in middle schools to determine if low-performing middle schools and high-performing middle schools differed in school climate, school health, organizational structures, and instructional practices.

To conduct their study, Styron and Nyman (2008) selected teachers from nine middle schools located in a southern rural state. From the nine schools, the researchers selected 283 teachers. They separated the teachers into two groups. Of the 283 teachers, 171 were from high-performing middle schools and 112 were from low-performing middle schools. Low-performing middle schools were defined as middle schools that had not met AYP for 2 consecutive years in reading, language, and math. High-performing

middle schools were defined as middle schools that had met AYP for at least 2 consecutive years in reading, language, and math. All subgroups, according to NCLB requirements, were represented in the student populations of the teachers involved in this study.

Three teacher questionnaires were used to collect data related to school climate, school health, organizational structures, and instructional practices. The questionnaire results were used to conduct a comparative analysis. All questions on the questionnaires were anchored to a four-point Likert scale in a parallel format. Data were coded to allow group comparisons between low-performing middle schools and high-performing middle schools.

Multivariate analysis of variance (MANOVA) and follow-up analysis of variance (ANOVA) were the statistical models used in the analysis of data. Raw scores of each item were scored for each participant; then an overall scale score was computed for each participant. Scores remained as raw scores for the purposes of comparing means between low-performing and high-performing schools. SPSS was utilized to examine the theory-based directional hypotheses. Significance was set at  $p < .05$ .

Contrary to the findings of Westhuizen et al. (2005), Styron and Nyman (2008) found that low-performing schools scored slightly higher on organizational structures and instructional practices. Regarding collegial and supportive behavior, the scores of high-performing schools were significantly greater than those of low-performing schools. High-performing middle schools scored lower on directive behavior. Lower directive scores in high-performing middle schools suggest that principals freely give teachers the opportunity to make instructional decisions based on professional knowledge (Styron &

Nyman). Regarding the health of the school cultures, there was no significant difference in the scores of high- and low-performing schools.

The findings in this study were essential to understanding the importance of a healthy culture. As did other studies, this study yielded promising evidence linking teacher interpersonal relationships with student performance (Gruenart, 2005; Styron & Nyman, 2008; Westhuizen et al., 2005). This research indicated the necessity of developing specific management strategies for the creation of effective organizational cultures in all schools, but especially in poorly performing schools.

The contrast between the findings of Westhuizen et al. (2005) and those of Styron and Nyman (2008) provided support that additional research could be beneficial to the body of knowledge related to school culture. In the research of Styron and Nyman and other research examining the culture of schools from varying performance categories, the forming of patterns was evident. As did the current research, Styron and Nyman categorized schools based on standardized test performance. Whereas Styron's study involved two classifications of schools, the current research examined three categories of schools.

The studies in this section support the idea that strong relationships, both student and adult relationships, create a nurturing environment that promotes an effective school (Gruenart, 2005; Rodriguez, 2008). With culture's playing a critical role in the success of a school, it is in the best interest of the public to gain an understanding of the characteristics of both low- and high-functioning schools (Styron & Nyman, 2008; Westhuizen, 2005). A healthy culture within a school supports the academic achievement of students (Chen, 2007). As NCLB requires schools to demonstrate

academic growth on an annual basis, the learning environment within schools needs to be of high quality. Failure to promote and support a healthy school culture detracts from a school's mission to maximize student achievement (Chen).

### **Research Related to the Negative Impact of NCLB**

The No Child Left Behind Act of 2001 was designed to guarantee that all students would be proficient in mathematics and reading by 2014. Unlike earlier versions of the Elementary and Secondary Education Act, NCLB greatly increased the level of accountability on teachers, schools, and school districts. Although much of the focus is on schools that are excelling despite high levels of accountability, unintended consequences have occurred as a result of NCLB. This section examines the literature related to the negativity associated with NCLB.

In 2006, LeFloch, Taylor, and Thomsen conducted a mixed-methods study to examine how NCLB accountability mechanisms influence schools in their implementation of comprehensive school reform (CSR) initiatives. Even though CSR models can be implemented to satisfy NCLB accountability measures, schools respond in various ways depending on multiple variables. The researchers designed the quantitative component of their study to address the following research questions: (a) Do CSR schools fail AYP and become identified for improvement (IFI) more frequently than do non-CSR schools? (b) If CSR schools are identified for improvement, do they abandon or sustain their CSR models? and (c) If CSR schools are identified for improvement, do they continue to implement the model? The qualitative portion of their study addressed the following questions: (a) Are teachers aware of NCLB accountability mechanisms, and do these serve to focus attention? (b) Are teachers motivated by NCLB accountability

targets? and (c) Does NCLB accountability facilitate or hinder CSR as a capacity-building mechanism?

The analyses presented were drawn from two waves of qualitative data collected for the National Longitudinal Evaluation of Comprehensive School Reform (NLECSR). The NLECSR is a 5-year, mixed-method evaluation of the implementation and impact of CSR models. Qualitative data were collected through interviews with teachers, principals, reform facilitators, and district administrators from 32 schools in five districts during the winter and spring of 2003. Follow-up data were collected in the spring of 2004 from 10 schools in three districts. The sample included schools with a wide range of CSR models and years of implementation. The analyses drew from both years of data collection, including a total of 72 interviews with teachers, principals, reform facilitators, and district administrators.

The quantitative component of the study by LeFloch et al. (2006) analyzed AYP status, schools that were IFI under NCLB, and CSR model sustainability. Data on each school's AYP and IFI status were collected via state education websites. The researchers used these data to determine the use of CSR models related to AYP status.

The quantitative results did not show a significant difference between the likelihood of CSR and non-CSR schools, after failing to meet AYP, to be identified for improvement. Regarding the implementation and sustainability of CSR models, the researchers found that schools were not significantly more likely to drop or sustain their CSR model after being identified for IFI status.

The qualitative results provided an avenue for the participants to voice their agreement or disagreement with issues related to NCLB and their respective CSR

models. The schools that participated in the study were located within the Riverton and Eastwicker School Districts. The staff from Riverton demonstrated a comprehensive understanding of NCLB and its provisions. Riverton staff understood the importance of achieving AYP and agreed that meeting the academic target served as a motivating factor. The teachers of Riverton did not perceive CSR efforts as supporting their efforts to achieve AYP. One teacher stated, “AYP requirements have manipulated their instruction, often in ways that do not bode well for CSR” (LeFloch et al., 2006, p. 361). This study’s results reinforced previous studies’ conclusion that the high levels of accountability generated by NCLB result in teachers’ altering their instructional practices (Abrams et al., 2003; Stecher & Barron, 2001).

The teachers of Eastwicker School District did not possess the same level of clarity related to NCLB and its provisions. Although the teachers demonstrated a basic understanding of NCLB, interviewees did not have knowledge of terms like safe harbor and corrective action. Failure to be aware of key terms prevented teachers from demonstrating a comprehensive understanding of NCLB. The teachers of Eastwicker appeared to be far less concerned than educators in Riverton about sanctions that could be imposed on their schools for not achieving AYP status. With regard to the CSR model, most of Eastwicker’s educators did not mention a connection between NCLB and their CSR model. Some actually indicated a possible disconnect between the CSR model and the mandated state assessment test. The majority of the interview data suggested that the accountability mechanisms most associated with NCLB had a minimal impact on teachers’ behavior and an even smaller effect on the CSR models that schools had adopted.

With the tremendous influence of NCLB on school systems throughout this country, it appears that AYP is the ultimate goal for all schools. This focus on academic achievement proves to be important; however, are educators failing to address content aside from mathematics and reading? Comprehensive school reform models are designed to strengthen the needs of an entire school, not simply to ensure that students succeed in math and reading. Although the quantitative findings of LeFloch et al. (2006) did not support schools' dropping CSR models due to their failing to meet AYP, the qualitative findings may lead the reader to question the fidelity with which the CSR is being implemented or sustained within the schools.

With the high levels of accountability created by the NCLB Act, school systems are honing their focus on the standardized assessment areas of reading and mathematics. Based upon previous studies highlighting the importance of a variety of course offerings on student success (Lee & Burkam, 2003), comprehensive reform models should be supported. The work of LeFloch et al. (2006) is important to the current research because of its examination of the impact of NCLB status on the learning environment within a school. As a function of certain NCLB sanctions, schools are required to create a school improvement plan that extends beyond strategies to improve students' reading and mathematics skills. The current research examined how this factor impacts the learning environment within schools.

In 2005, Haretos conducted a study to examine the effectiveness of NCLB in determining students' annual academic progress, also referred to as AYP. The researchers specifically examined the extent to which the outcomes of achievement-based accountability systems and growth-based accountability systems agree. The standardized

test that students are required to take represents an achievement-based accountability system. The results illustrated the negative unintended consequences of an achievement-based definition of AYP.

The sample for this study consisted of 992 schools in Tennessee that served students in grades three, four, or five during the 2002-2003 academic year and for which achievement and growth data were available. These schools collectively served 497,171 students. The data set included (a) whether or not the school made AYP in math; (b) a value-added measure, the school's cumulative gains index for math; (c) the number of students enrolled in the school; (d) the percentage of students receiving free or reduced-price lunches; and (e) the percentage of students in each of the NCLB racial classifications. The researcher decided to examine only math results because student performance in this subject was more variable than it was for other tested subjects.

In the State of Tennessee, AYP for math in school year 2002-2003 was defined as 72.4% of students performing at or above the criterion-referenced proficient level. The cumulative gains index was the difference between a school's 3-year average cumulative percentage of the state's norm and 100% of the cumulative norm gain, divided by the corresponding standard error. The gains index was based on norm-referenced test results. At approximately .95, the norm- and criterion-referenced math tests used in 2002-2003 were highly correlated, allowing for the subsequent comparison of AYP and growth in the study.

With regard to NCLB, the standard for achievement-based accountability is making AYP. The standard for a growth-based accountability system is established as making at least 1 year's growth. With these two systems working in cooperation, the

accountability systems are readily comparable. In comparing the relationship between AYP and growth, four scenarios were provided for a given school. The possibilities included (a) the school made AYP and at least 1 year's growth, (b) the school made AYP but did not make at least 1 year's growth, (c) the school did not make AYP but made at least 1 year's growth, and (d) the school did not make AYP and did not make at least 1 year's growth.

Although making AYP is indicative of the students' success on the annual test, it is not always reflective of the academic growth that is expected during a typical school year. Of the 992 schools analyzed in the study, 530 schools met both AYP academic targets and 1 year's growth. On the other hand, 90 schools failed to meet both AYP targets and demonstration of 1 year of growth. The two systems found different outcomes for the remaining 366 schools (37%).

The 90 schools that achieved a year's growth but failed to make AYP disproportionately served economically disadvantaged and minority students. Even though these schools were closing the achievement gap between White and minority students, the United States Department of Education imposed sanctions on the school for failing to make AYP (Haretos, 2005). Due to the fact that these schools were failing to meet AYP, they were viewed as failing schools. Conversely, the 276 schools that did not achieve a year's growth but did make AYP disproportionately served White students. As a result of making AYP, the current accountability system perceived these schools as successful, even though they failed to meet the benchmarks for 1 year of growth. Because of overreliance on AYP data, achievement data can be misleading as they provide educators and parents a false sense of student progress.

Although schools were making adequate academic gains within a 1-year period, they were perceived as failing schools due to their inability to meet NCLB academic targets. This phenomenon can help to support deficit thinking. Over an extended period of time, students and teachers may question their ability to be successful due to the public's perception of their attending or working in a failing school. The current research examined the impact of NCLB sanctions on the perceptions of teachers. Haretos's (2005) research provided insight into the mindset of teachers who work in schools that fail to make AYP. The adverse effect of schools' being labeled for not making AYP may be an unintended consequence of the No Child Left Behind act of 2001.

In 2007, Smith and Gorard conducted a study to examine teacher certification requirements related to the No Child Left Behind Act of 2001. The researchers analyzed teacher certification requirements from various states identifying issues that exist in the current certification process. Specifically, the researchers examined the certification requirements of Wisconsin and California. Based on various reports, discrepancies existed between state and national data.

In 2002, the United States Congress passed NCLB, federal legislation mandating educational reform. Even though the Congress established the mandate, the United States has a decentralized system of education in which school districts report directly to their respective states, not the government. With no national assessment system or curriculum linking the state with a national education system, states were expected to establish their own teacher certification requirements. In 2003, each state was required to submit to the U.S. Department of Education an outline of the steps they planned to take to ensure full compliance under NCLB for teacher quality by the end of the 2005-2006 academic year.

The states were not expected to coordinate their respective plans with any other state. As a result, each state possesses its own requirements for teachers to become highly qualified. Under the current structure, a teacher who is considered highly qualified to teach in one state may not be qualified to teach in another state, depending on the state's certification requirements. Smith and Gorard's (2007) study examined certification requirements in Wisconsin and California, the states with the highest and lowest rates of certified teachers, respectively.

To gain teacher certification in the State of Wisconsin, a high school teacher must have a major in the subject he or she plans to teach, whereas a middle school teacher must have at least a minor in the taught subject area. Wisconsin strictly adhered to these standards. In 1994, Wisconsin did not hire any new teacher who failed to meet certification requirements. As a result of the strict adherence to certification guidelines, Wisconsin did not mandate requirements that other states may have been forced to mandate. For example, Wisconsin did not require a content-specific bachelor's degree nor did it employ any content-related testing of its prospective teachers. In 2003, Wisconsin reported that 99% of all classes, and 97% of classes in high-poverty districts, were being taught by highly qualified teachers. This report represented the highest certification compliance rating of any state. Even though Wisconsin reported that 99% of classes were taught by certified teachers, a survey undertaken by the National Center for Education Statistics reported only 75% of mathematics teachers and 82% of science teachers teaching Grades 7-12 as having majors in their respective fields. This disparity between the figures reported by the state and those cited by external organizations underlies some of the difficulties in obtaining reliable data on NCLB-compliant teachers

in all schools, regardless of the state.

To be highly qualified in California, a teacher of a core academic subject must have a bachelor's degree and a state credential, or must have held an intern certificate or credential for no more than 3 years and demonstrated core academic subject matter competence. In 1996, California implemented a program to reduce class sizes from 30 to 20 students. This initiative resulted in the large recruitment of inexperienced and unqualified teachers. In 2000, 50% of mathematics teachers of Grades 7-12 had majors in their respective fields as well as state certification. California had the lowest ranking for teacher certification rates. In its 2003 Consolidated State Application, California estimated that approximately 48% of classes in core academic subjects were taught by highly qualified teachers, whereas in high-poverty schools, the figure was only 35%. According to the state's Consolidated Performance Report for the 2003-2004 school year, these data were not consistent with requirements established by NCLB. To comply with NCLB, the state would need to reduce the number of underqualified teachers at a rate of 60% per year.

Although Smith and Gorard (2007) focused their research on teacher certification, a larger issue relates to the inequities that exist when considering the implementation of NCLB. Depending on the state, teacher certification requirements and academic achievement targets vary greatly. With sanctions' being applied as a result of failing to meet AYP targets, schools suffer greatly. The current research aimed to gauge the impact of sanctions on learning environments in six schools within one school district.

NCLB was created to improve academic achievement by increasing the levels of accountability for school and district personnel. Unfortunately, there have been

unintended consequences that have occurred due to its implementation. Even though some researchers have argued that students benefit from a wide variety of course offerings in school (Lee & Burkam, 2003), the levels of accountability associated with NCLB result in schools' focusing solely on reading and mathematics (LeFloch et al., 2006). The fact that AYP targets and standardized tests are generated at the state level means that student growth is not consistently tracked (Haretos, 2005). Consequently, schools that have demonstrated academic growth but fail to make AYP are perceived as failing schools (Haretos). Although NCLB was designed to ensure the academic success of all students by 2014, its implementation on the national level has resulted in problems and inequities.

### **Literature Related to Deficit Theory**

The No Child Left Behind Act of 2001 requires all school systems to publish all standardized test scores for public schools each school year. Based on each school's current and historical performance on the standardized tests, each school is classified or labeled. The label, especially in the case where a school is designated as restructuring, may be affected by behaviors consistent with the deficit theory or deficit thinking. According to deficit theory, people have the tendency to blame the internal whole or components of an organization for its faults, without considering external factors (Valencia, 1997). When considering the range of labels that NCLB places on schools, the deficit theory may impact the way in which a school is perceived by its staff. This section of literature explores deficit theory and trends that result from the condition of a population or school.

The deficit theory emerged in the 1960s as an attempt to explain why

disadvantaged students demonstrated a tendency to experience high rates of failure in school (Delgado & Stefancic, 2001). In 2002, Ford, Harris, Tyson, and Trotman conducted a critical examination of the underrepresentation of African American students in gifted education programs and offered suggestions for recruiting and retaining African American students. The major premise of the study by Ford et al. was that a deficit orientation held by educators hindered access to gifted programs for diverse students and hindered the willingness of educators to recognize the strengths of African American students. Within the article, Ford et al. identified seven major symptoms of deficit thinking: (a) traditional IQ-based definitions, philosophies, and theories of giftedness; (b) identification practices and policies that have a disproportionately negative impact on Black students; (c) a lack of training aimed at helping educators in the area of gifted education; (d) a lack of training aimed at helping teachers understand and interpret standardized test results; (e) inadequate training of teachers and other school personnel in multicultural education; (f) inadequate efforts to communicate with Black families and communities about gifted education; and (g) Black students' decisions to avoid gifted education programs. To overcome the major symptoms related to deficit theory, the authors suggested school personnel and students adopt contemporary theories and definitions, use culturally sensitive instruments, and provide multicultural preparation for educators. In addition, the authors emphasized the importance of identifying and serving gifted underachievers. With regard to the underrepresentation of African American students in gifted programs, deficit thinking appeared to play a role. The authors provided the reader with strategies to offset the thought process that slows the academic progress of African American students. Failing to provide equitable educational

opportunities to large segments of the population may result from tracking.

In their study, Ford et al. (2002) examined the condition of African American students' not being enrolled in gifted and talented programs. Over time, students' failing to participate in these types of programs will result in a conditioning process of both African American students who are not in the gifted and talented program and non-African American students who are enrolled in the gifted and talented program. This condition can be perceived as deficit thinking. With regard to the current study, the researcher examined the extent to which the NCLB labels impact learning environments. The labels may serve as a very influential factor in the perception of the learning environment within the various schools.

The deficit theory is largely based on stereotypes that misrepresent the true ability of a person or group of people. In 2003, Ansalone conducted a cross-cultural analysis between the United States and Britain to determine if tracking students creates similar learning trajectories for all students or has particularly devastating consequences for the less advantaged. As a part of his research, Ansalone explored the history of tracking students and listed the benefits and consequences of the practice. The reasons for student tracking included a more focused delivery on information and minimization of the hindrance of high-achieving students from reaching their potential as a result of low-achieving students in the same class. The problem in both the United States and Britain was that students were being tracked on the basis of dress, race, and parental work patterns (Ansolone). As a result, students of lower socioeconomic status were often provided with inequitable educational opportunities. Specifically, students assigned to lower tracks experienced less rigorous curricula, lower levels of student-teacher

interaction, lower teacher expectations, and differences in teacher quality (Ansolone). These data were consistent in both the United States and Britain. Ansolone concluded that tracking often segregates students according to class and race and works to instill negative attitudes about parents regarding intelligence and learning. Tracking creates restricted learning trajectories for disadvantaged students, especially those from families who lack educational support (Ansolone). This study supported the tenets of the deficit theory. Due to the preconceived notion that a group of students is inferior in relation to a different group, the inferior group is provided with a substandard education. The students who occupy the inferior group are blamed for their shortcomings as opposed to the condition or institution that promotes the inequalities.

Ansolone (2003) assessed whether or not tracking impacts student learning. The current research aimed to determine whether or not the NCLB status of individual schools results in the solidification of an unhealthy learning environment, thereby hindering students' ability to maximize their academic potential. Ansolone's work serves as a foundation for deficit theory. Although race, socioeconomic status, or family status may promote deficit thinking, researchers have conducted studies to discredit deficit thinking.

In 2004, Morris conducted a study of two schools. Both schools were predominantly African American located in low-income communities. One school was located in St. Louis, Missouri and the other in Atlanta, Georgia. Both schools had a reputation for successfully educating their students. Due to the success of these schools that had excelled in spite of demographics that are often indicative of subpar academic achievement, deficit theory was questioned.

Rather than examining particular classroom practices and pedagogies, the researcher focused on the relations among people and institutions. Morris (2004) used the critical race theory as his theoretical framework. Morris stated,

Critical Race Theory offers a counter-narrative to dominant views on African American schooling, exposes how race and racism affect the schooling and lives of African American people, and reinterprets liberal civil rights practices and laws by examining their limitations in improving the overall quality of life for African Americans. (p. 74)

Applying critical race theory, the researcher conducted a qualitative study on two elementary schools.

Morris (2004) purposely selected Fairmont Elementary School in St. Louis, Missouri. Historically, Fairmont had outperformed the majority of schools in St. Louis based on attendance rates and standardized test scores. In 1997, the United States Secretary of Education recognized Fairmont for having an outstanding Title I program. In Atlanta, the researcher purposely selected Lincoln Elementary School. In part, the school was selected due to its reputation for playing an integral role in the nearby community. In 1997, Lincoln was recognized as a “Georgia School of Excellence”; this award was based on a combination of factors including student attendance rates and standardized test scores, curriculum, and parent participation rates.

From 1994 to 1997, Morris (2004) visited Fairmont Elementary School to conduct interviews and observations. He also attended key events including Meet the Teacher Night, Open House, and Kwanzaa celebrations. From 1998 to 2001, Morris visited Fairmont once a year, for approximately a week at a time, to examine the change and

continuity in the school. In total, the researcher spent more than 1,000 hours in the school.

From 1999 to 2002, the researcher spent time at Lincoln Elementary School. During the spring and fall of 2000, Morris was in the school 3 to 4 days per week. In the spring of 2001, the researcher spent approximately 2 days a week in the school and community. The researcher conducted interviews with staff and faculty. During his study, Morris attended several key events.

Ethnographic data collection methods included observations of faculty and staff interactions with students and families; participant observation; community observations; recording of field notes; informal questioning of community residents; and interviews with parents, residents, and school personnel. In addition, Morris (2004) collected and analyzed documents including brochures, letters, handbooks, and newsletters.

Demographic information related to the communities was based on 1990 and 2000 United States Census Bureau data.

The findings from the investigation were grouped according to major themes. A theme consistent in both schools related to the schools' and communities' ability to band together to overcome inequalities associated with race and social class. Morris (2004) found that at both Fairmont and Lincoln the connectedness to students, families, and their respective communities was outstanding. In both schools, school personnel felt it was important to build and sustain relationships with families and community residents. The faculties of Lincoln and Fairmont felt responsible for welcoming parents into the schools. School personnel at both schools participated in African American historical and cultural celebrations. The findings were supported by thick and rich descriptions of interview

data. The researcher provided quotations from the participants throughout the study.

Morris's (2004) study discredited the deficit theory. By immersing himself in the culture of two successful African American schools, Morris was able to determine the value of the inner workings of the school. By examining the perceptions of teachers regarding learning environments, the current researcher tested the deficit theory.

Standardized testing and learning environments played a critical role in the current research. In using the deficit theory as the theoretical framework, the reader needs to understand the perceptions of the staff members. The teachers and principals served as the internal component of all three schools. With the deficit theory's placing the blame on the organization, without considering external factors, the staffs' perceptions were vital in determining the extent to which the NCLB status impacted the learning environment of each school.

Standardized testing serves as the basis for each school's NCLB status. The fear of NCLB sanctions exerts pressure on the school to have students perform on the test. Teacher perceptions, as they relate to NCLB, were captured through the researcher's survey and the principal interviews. Due to the anxiety created by NCLB sanctions, teachers are tailoring their instructional strategies to cover the content on standardized tests (Abrams et al., 2003; Stecher & Barron, 2001). Understanding the role of standardized tests in the school can provide insight into their impact on the learning environment.

The learning environment must be established to support the educational mission of a school to maximize student learning. Whether rooted in healthy interactions, personalization, or collaboration, research has emphasized the importance of these factors

in creating a progressive learning environment (Chen, 2007; Gruenart, 2005; Rodriguez, 2008). The learning environment is the basis for an effective school. NCLB was designed to serve as a support to schools; however, the threat and imposition of sanctions may result in the destruction of a strong learning environment. The following section of the critical literature review stresses the importance of maintaining a sound learning environment.

### **Inferences for Study**

The researchers cited throughout the critical literature review used a variety of approaches to make conclusions regarding their research. Based on their methodologies, the current researcher's methodology was shaped in numerous ways.

Stecher and Barron (2001), Abrams et al. (2003), and Mintrop (2003) all conducted analyses on the impact of standardized tests; however, each took a different approach. Each study helped to shape the direction of the current research. In 2001, Stecher and Barron surveyed and conducted interviews with teachers of middle and elementary schools. As was the case in the current research, NCLB served as a categorical factor. In the current research teachers were surveyed; however, other staff members were not interviewed. In 2003, Abrams et al. conducted a qualitative study to examine teachers' perceptions related to high-stakes testing. The researchers gathered data by interviewing and observing teachers. To strengthen the current study, the researcher did not conduct interviews but collected survey data solely to measure the impact of academic expectations, engagement, communication, and safety as they relate to schools' learning environments. In 2003, Mintrop conducted a case study of 11 schools in Maryland and Kentucky. The researcher conducted interviews, observations,

and surveys. The study focused on elementary and middle schools. The current research focused solely on six urban elementary schools. Unlike Mintrop's study, the current research did not include observations. Due to the nature of the current study, observations would not have enhanced the data collected. The methodology of previous researchers was revised to clarify the methods of the current researcher.

Understanding the complex nature of learning environments within schools can be difficult. The researchers cited within this section found ways to measure various aspects of school culture and, subsequently, determine relationships based on empirical evidence. In 2005, Gruenart conducted a study to draw conclusions regarding school culture and student achievement. As did Gruenart, the current researcher measured learning environments using various domains. Whereas Gruenart used professional development, colleague collaboration, and parent relationships as his dependent variables, the current researcher used academic expectations, communications, engagement, and safety. The current research did not include student-level, standardized test data. The current researcher determined the school's status using NCLB data. In 2007, Chen used a school performance index to understand the impact of school culture. Similar to Chen's study, which was conducted in elementary schools in the New York City Public Schools, the current research was also based in elementary schools within an urban school district. Whereas Chen collected longitudinal data, the current researcher was able to obtain an accurate reflection of each school's learning environment by administering a single survey. The researchers cited within this section created a framework to analyze school culture.

## **Chapter III**

### **Overview of Methodology**

Based on the goals of the No Child Left Behind Act of 2001, schools are expected to educate all children to become proficient in mathematics and reading by 2014. To accomplish this goal, each state, as well as each school district, is required to create a plan to achieve the 2014 goal. Nationally, these plans establish academic benchmarks that school systems need to achieve to make AYP. Failure to achieve AYP results in sanctions' being imposed on schools and school districts. Through use of the deficit theory model (Valencia, 1997) as its conceptual framework, this study was designed to examine the impact of NCLB status on staff perceptions regarding the learning environment in six urban elementary schools located in the mid-Atlantic region of the United States.

#### **Research Question**

1. To what extent is there a difference in teachers' perceptions of learning environments at six public schools, with differing NCLB statuses, located in an urban school district?

#### **Hypothesis**

The researcher hypothesized that there would be statistically significant differences in teacher perceptions of learning environments given the schools' NCLB statuses. This hypothesis was influenced by Valencia's (1997) deficit theory. The null hypothesis was stated as follows: There is no difference in learning environments, regardless of NCLB status. Discovery of conditions satisfying the alternative hypothesis would support the rationale behind Valencia's deficit theory.

## Theoretical Framework

Deficit theory served as the theoretical perspective for this research. According to deficit theory, people have the tendency to blame the internal whole or components of an organization for its faults, without considering external factors (Valencia, 1997). In applying the theory to this research, one might assume that persons outside the school blame the internal organization for its deficiencies. Based on the literature related to NCLB, standardized testing, and learning environments, the researcher hypothesized that NCLB designations would have a significant impact on the learning environments of the schools participating in the research. The findings serve as a basis to support or refute use of the deficit theory to explain the impact of NCLB on teachers' perceptions of learning environment. Figure 1 depicts the deficit theory model

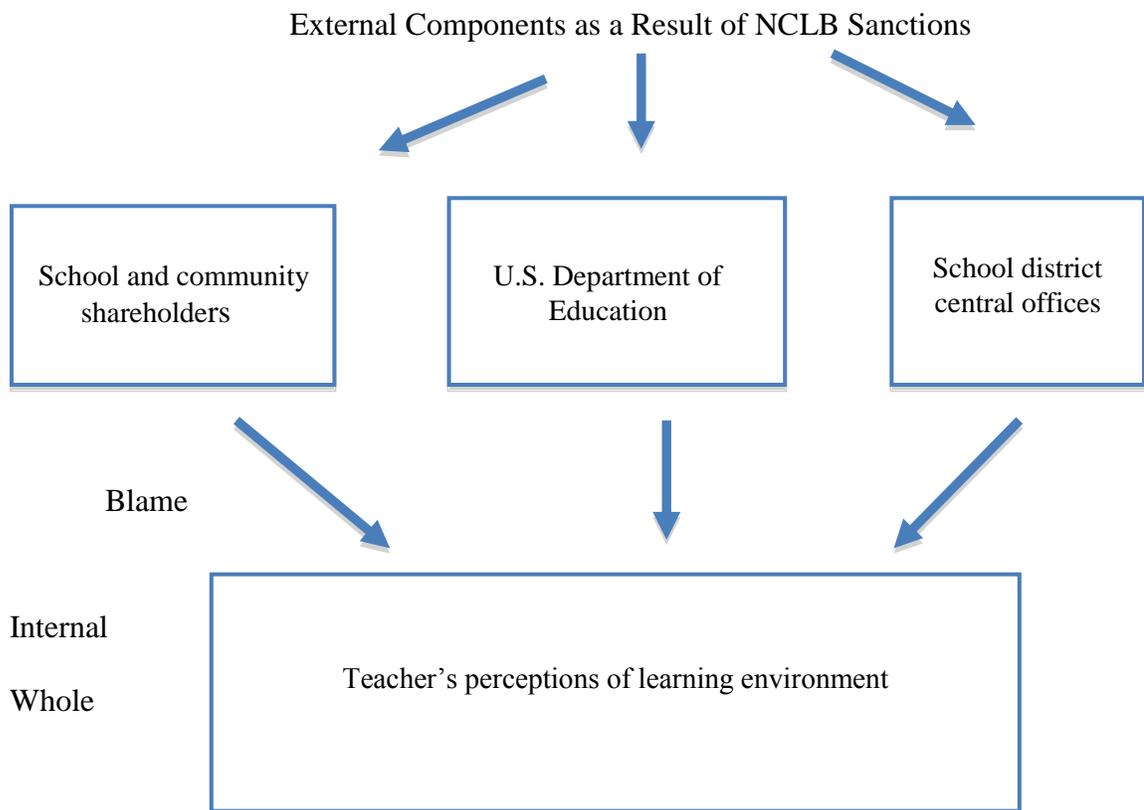


Figure 1. Model of the deficit theory.

## **Overview of the Study**

The research was designed to determine whether there were significant differences in teacher perception of learning environment given the school's NCLB status. The four domains of academic expectations, safety, engagement, and communication, which as a whole constitute the environment, served as the dependent variables. The researcher measured the learning environment through a focus on these four domains. Each domain score was computed by aggregating respondents' answers. The researcher conducted an analysis of six schools, classified into three NCLB statuses, to examine the impact of NCLB designations on the perceptions of teachers.

The researcher selected six elementary schools located in an urban school system in the mid-Atlantic region of the United States to conduct the analysis. The six schools were classified based on their respective NCLB statuses. Two schools representing each status were selected. The researcher conducted a survey of the teachers within each of the six schools.

## **Research Design**

A 56-item survey was used to collect data for this quantitative study. In addition to three demographic items, the survey included one open-ended question. The survey allowed the researcher to obtain a wide array of focused information related directly to the learning environment. The survey was designed to collect data from teachers to measure the learning environment of three pairs of schools. As a result of the researcher's asking all teachers within the select schools to participate in the study, the researcher utilized a comprehensive sample of teachers at each school.

The researcher used a parallel sample design to collect data from the staff of each

school (Wiersma & Jurs, 2005). Because data were collected one time for each teaching staff, a cross-sectional design was used to collect data (Wiersma & Jurs). For teachers who were not administered the survey on the initial day due to absence or some other unforeseen event, the researcher made provisions to have them complete the survey at a later date. Surveys were administered online utilizing the Survey Monkey data collection interface.

The researcher administered the surveys from December 1 through December 18, 2009. At each school, the researcher provided the overview of his study between 8:10 and 8:45 a.m. Most teachers completed the survey within the first 24 hours. Other than an unforeseen event at School Not in Need of Improvement B, each data collection process was uninterrupted.

Due to participation rates exceeding 70% on the initial day of data collection at five schools, make-up sessions were conducted at only one school, School Not in Need of Improvement B. The researcher originally administered the survey at that school on December 2, 2009. Due to an impromptu training event required by central office administrators, only 53% of the teachers attended the overview session and completed the survey. As a result of the low participation rates, the researcher conducted a make-up session on December 7, 2009. After the make-up survey session, 85% of teachers had completed the survey.

### **Validity**

The research for this study incorporated a nonexperimental, causal-comparative survey design. The researcher understood the importance of addressing the various threats to both the internal and external validity of the research. Even though the pilot

test resulted in a participation rate in excess of 70%, which would result in a population as opposed to a sample, the researcher explored validity threats in the event of participation rates failing to exceed 70% in the actual administration at the six schools. Within the following sections, the researcher examines threats to both internal and external validity.

The eight factors that threaten the internal validity of studies include history, maturation, testing, instrumentation, statistical regression, selection, mortality, and selection–maturation interaction (Wiersma & Jurs, 2005). Due to the cross-sectional design of the current study, maturation, testing, statistical regression, mortality, and selection–maturation interaction did not present threats to the study. In addition, instrumentation and history did not present threats to the internal validity of the study. To address instrumentation, only one researcher introduced and administered the survey at the six schools. The researcher did not vary the procedures at the administrations. Over the course of data collection, no unexpected events occurred to alter or hinder the proper administration of the surveys.

According to Wiersma and Jurs (2005), four threats exist in attempting to address external validity. These threats include interaction effect of testing, interaction effects of selection biases and the experimental treatment, reactive effects of experimental arrangements, and multiple-treatment interference. Due to the design of the study, these factors did not present threats to the external validity of this study.

### **Other Considerations**

The researcher used a survey to collect data related to the learning environment of each school. Within the survey, four-point Likert-type items were used to measure the

responses. A Likert-type item represents an ordinal scale. The four-point Likert scale did not provide the respondent with an opportunity to select a neutral response. The response categories were *strongly disagree*, *disagree*, *agree*, and *strongly agree*.

The participants of the survey self-reported their responses. Due to self-reporting, the concern for honesty among respondents was critical. According to Wiersma and Jurs (2009), survey respondents may be less than honest when the topic is somewhat sensitive; however, these researchers contended that survey respondents are unlikely be dishonest when completing surveys for educational research.

The researcher recruited teachers using the self-selection approach. Participation in the survey was completely voluntary. The way in which respondents chose to answer the questions was of their own volition without bias from the researcher or any school personnel. Such conditions tend to encourage respondents to answer questions more honestly (Yin, 1994).

### **Instrumentation**

The survey used in this research was based on the 2008 Learning Environment Survey administered by The New York City Department of Education. Permission to use the survey was granted by a representative of the Office of Data and Accountability of the New York City Public Schools. This survey was selected due to its comprehensive nature. In 2008, New York City Public Schools administered the survey to parents, students, and teachers. For this study, the survey was administered to teachers only.

Rockoff and Speroni (2008) analyzed the reliability of the 2008 Learning Environment Survey. They measured the reliability by calculating Cronbach's alpha for each of the survey's four domains. With alphas higher than .90 in nearly every case, the

levels of reliability were very high. The only occurrences of alphas lower than .90 resulted from fewer questions' being asked in the communications domain, not from lower average consistency among questions (Rockoff & Speroni).

Rockoff and Speroni (2008) examined the consistency of the environmental surveys across domains within respondent groups and across respondent groups within a single domain. With correlation coefficients generally ranging from .75 to .95 and similar levels of correlation for each of the respondent groups, the researchers found very high correlations across the four domain scores within each subject group. In comparing the correlations across respondent groups, the researchers found a stronger relationship between parent and student responses than between teacher responses and the responses of either of the other two groups. The one exception was for the safety domain, for which teacher and student responses were in relatively close alignment (Rockoff & Speroni).

To determine the level of internal validity for the 2008 environmental survey, Rockoff and Speroni (2008) performed a factor analysis on the average score for all questions asked to each respondent group. If the four domains were truly distinct traits of the school environment and the questions on the survey matched the domains to which they were directed, the factor analysis should have found four significant factors, with each question loading largely onto the single trait for which it was directed. The researchers limited the analysis to retain only factors with an Eigenvalue greater than or equal to 1, the common bar used in factor analysis to isolate traits with significant power to explain covariance among survey items. The results did not support the notion that the four domains are distinct traits identified solely by the questions directed at them.

Although the findings varied slightly across respondent groups and school types, researchers generally found one major factor that they interpreted as corresponding to an overall sense of school quality. This factor had by far the greatest explanatory power in the data, and nearly all the questions loaded greatly onto this factor. The researchers suggested, “The separated concepts of Academic, Communication, Engagement, and Safety domains may not be warranted given the manner in which respondents answer the current set of survey questions” (Rockoff & Speroni, p. 3).

Rockoff and Speroni (2008) examined the environmental survey for its external validity. Since the environmental survey was not designed with a single purpose of measurement, the researchers acknowledged that there could be no single test for external validity. To gain an understanding of the external validity of the environmental survey, the researchers examined the results of the survey with other measures of school quality. The researchers measured the correlation between survey domain scores and four other measures of school quality: the progress report overall score, Quality Review Score, the school’s status with regard to the No Child Left Behind Act, and the number of school suspensions per student enrolled. The analysis was performed separately for elementary, middle, and high schools and focused on the environmental survey score across all respondent groups as well as for each respondent group separately. Because at the time of the analysis, progress report grades had yet to be released, 2007 environmental survey data were used. Rockoff and Speroni found significant positive relationships between the total score on the environmental survey results and the progress report grade, the Quality Review, and NCLB status. In addition, the researchers found a strong negative relationship between scores on the safety portion of the survey and the number of

suspensions per student. Overall, the evidence suggested that the environmental survey has validity as a multidimensional measure of school quality.

### **Survey Pilot Tests**

To tailor the survey to the needs of this study, the researcher conducted two pilot tests. The first pilot group consisted of 10 teachers from Pilot I Elementary School. Pilot I Elementary School was an appropriate school to pilot the survey because it had demographics similar to those of the six schools in the study. The pilot group completed an electronic version of the survey and provided feedback regarding the questions. Participants were asked to provide feedback regarding the wording and content of each question. The researcher examined all of the comments and made modifications to the survey accordingly.

The second pilot study was conducted at Pilot II Elementary School. The researcher used the second pilot study to determine the effectiveness of the changes to the survey after the first pilot study. In addition to asking the second pilot group to provide feedback regarding the questions and content, the researcher requested that participants provide feedback regarding an open-ended question. Conducting two pilot studies maximized the feedback regarding the survey.

**Pilot Study I.** On February 4, 2009, the researcher was granted permission by the school's principal to use her staff in a pilot study. On February 13, 2009, the researcher conducted a pilot study of the survey to obtain feedback from the participants. The pilot group consisted of 10 teachers. The pilot study was conducted at 8:10 am at Pilot School I. The pilot study began with all participants' recording their names and e-mail addresses on an attendance sheet. The researcher provided a brief overview of his research and the

purpose of the pilot study. The researcher explained that each teacher would be e-mailed a copy of the survey. The participants were given instructions to complete the survey, critique the language of the survey, and provide general feedback when the survey was complete. A paper copy of the survey was provided for one of the participants who could not access his e-mail address.

Upon starting the survey, participants stated that they were having a difficult time answering questions because the survey program did not appear to be recording their answers. The researcher took note of this flaw in survey design and requested that the participants continue with the survey. The problem with the survey design was limited to the first section of the survey. The first person completed the survey in 9 minutes, whereas the last person completed it in 14 minutes.

After all participants completed the survey, the researcher conducted a focus group that included all of the participants. The purpose of the discussion was to obtain feedback regarding the survey. In addition to the issues related to the design of the survey, the participants provided feedback regarding the ambiguity of language in some questions and the four-point Likert scale. Three typographical errors were also identified.

The first part of the survey was mistakenly designed to allow respondents to check only one response per column. After consulting with representatives from [www.surveymonkey.com](http://www.surveymonkey.com), it was determined that the “forced ranking” setting needed to be removed for the first section of questions. The correction was executed allowing future participants to answer the questions in the intended manner.

The participants expressed confusion with the wording of some questions, specifically, in the first and seventh sections. In the first section, the survey’s use of

“school leaders” to begin their questions resulted in limited confusion. The respondents stated that they were not certain if the term school leaders referred to school-based leaders or executive leaders of schools. To clarify the language in the first section, the researcher modified the language by changing school leaders to “school-based leaders”; to further clarify the language of the first section, the researcher included “principal” and “assistant principal” in parentheses after school-based leaders. In the seventh section, the participants expressed confusion with the language as it referred to professional development. The participants were seeking a distinction between professional development obtained at school, or coordinated by the school, and professional development that occurred outside the school, due to their own initiative. To address this situation, the researcher included language that specified professional development obtained at the school or professional development that was provided due to the coordination of the school. A second pilot study of the survey was conducted to test the modifications to the original survey.

The participants shared their wish to have a five-point Likert scale for several of the questions. Specifically, the respondents wished to have a five-point Likert-type scale for response to the questions in sections four and five. Some of the participants, 6 of 10, felt that the four-point Likert-type scale reflected their feeling in an inaccurate manner by forcing an answer of agreement or disagreement. The researcher noted the request; however, he did not change the Likert-type scale. Because the percentage of requestors was 60%, for only two questions, the researcher decided to assess the participants from the second pilot group to determine whether or not the Likert scale should be modified.

Pilot Study II. On February 26, 2009, the researcher conducted the second pilot

study for the survey. Prior to conducting the pilot study, the researcher was granted permission from the principal of the school to use his teachers as the sample population. An informational letter was sent to the participants of the pilot study. The letter included details regarding instructions for accessing the survey, purpose of the study, intentions of the study, and the confidentiality of the results. The letter and survey were e-mailed to the principal on February 25, 2009. In turn, the principal forwarded both the letter and survey to all teachers via e-mail. On February 26, 2009, the teachers completed the survey. As a function of the survey, all results were returned directly to the researcher upon each teacher's completion of the survey. With 15 of 15 teachers responding, the response rate was 100%.

On February 27, 2009, the researcher conducted a focus group with teachers from the second pilot study; the focus group consisted of six teachers. The teachers stated that the survey took them between 12 and 15 minutes to complete. They stated that the questions were very clearly written and that the content of the questions accurately addressed quality of education issues within the school. In addition to answering the survey questions on the questionnaire, the participants in the second pilot group were expected to answer one open-ended question: "How have NCLB sanctions altered your role as a teacher?" When specifically asked about the wording of the question, a female respondent stated that she felt the question, that is, the way it was written, was leading. She stated that the word "how" should be eliminated and the question should read, "Have NCLB sanctions altered your role as a teacher?" Another respondent stated that NCLB sanctions represent a broad concept, asserting that a short statement of clarification should be used to introduce the question. The researcher modified the question to reflect

the suggestions offered by the second pilot group. The question then read, “How do you feel your school’s NCLB status affects you?”

The researcher asked the second pilot group about several suggestions provided by the first pilot group. Specifically, the researcher asked about the four- versus five-point Likert scale. The participants of the second pilot group felt that the four-point Likert scale possessed the capability of accurately reflecting their feelings on all questions. Additionally, the second pilot group stated that the use of the term school-based leaders resulted in the participants’ knowing the exact level of leadership being assessed in each question. As did the first pilot study, the second pilot study provided useful feedback. As a result of the suggestions, the researcher modified the survey instrument to effectively meet the needs of the study.

### **Selection of Schools**

Several factors were taken into account when selecting schools. The researcher sought six elementary schools that represented the three specific NCLB statuses. Elementary schools within this selected district tended to have between 20 and 35 teachers. The researcher selected two schools to occupy each NCLB status: Not in Need of Improvement, Corrective Action, and Restructuring. The researcher selected two of the 19 schools that were classified as Not in Need of Improvement, two of the 10 schools that were in Corrective Action, and two of the 11 schools that were in Restructuring. All schools were located within the same school district.

All six schools had student bodies that were at least 80% African American. In addition, each school had a similar rate of students who receive free or reduced-price meals. The free or reduced-price meal rate for each school exceeded 70%. Selecting

these schools minimized academic disparities that may be rooted in racial or economic conditions.

### **Survey Participants**

The researcher requested that all teachers at each of the six schools participate in the survey. By including all teachers, the researcher used the comprehensive sampling strategy (Wiersma & Jurs, 2005). Based on participation rates from the pilot tests, the researcher expected over 70% of teachers in each school to complete the surveys.

### **Research Procedures**

After receiving approval from The George Washington University Institutional Review Board (IRB), the researcher worked in cooperation with each principal to coordinate a series of events. The researcher sent an e-mail to recruit teachers from each principal's school. The researcher asked the principals to send the recruitment e-mail to all of the teachers in their respective schools. The researcher and principal determined a 45-minute period of time for the researcher to meet with the teachers. To avoid interrupting teachers' instructional time, the researcher and principal met with teachers during a 45-minute block of schoolwide planning time between 8:00 and 8:45 am. During this period of time, the researcher provided an overview of the study. Although the researcher provided the overview, the secretary e-mailed a link to the survey to each teacher (see Appendix A). Each teacher had 48 hours after the overview to complete the survey. The first section of the survey contained the consent form. Teachers who agreed to participate in the survey were provided instructions on how to continue with the survey, whereas teachers who did not agree to participate were prompted to discontinue the survey. Immediately after the overview session, the researcher was available to

provide technical support to any teacher who requested clarification. As a function of Survey Monkey, the web-based Internet company, each completed survey was submitted into a repository, separated only by school. Research procedures remained consistent for each school.

In the event that teachers were absent on the day of the overview and survey administration, a second day was determined to administer the survey to these teachers. Of the six schools that participated in the surveys, only one school needed a make-up session due to low participation rates. To ensure consistency in the administration of the survey, the researcher used the same procedures during the make-up session.

After the survey data were analyzed, the researcher shared the results with the principal of each school. Principals were provided the results of the surveys within 2 months of the administration of the surveys. Upon viewing the results, principals were given an opportunity to share their thoughts regarding the results of the surveys. Overall, the principals were in agreement with the results from their staffs. For example, the principal of School Not in Need of Improvement A stated, "I am not surprised by these results; my teachers generally do whatever is expected of them" (personal communication, December 22, 2009). On rare occasion, the principals took exception to the results. For example, the principal of Restructuring School A stated, "I don't believe the staff believes we don't communicate with parents enough; I feel like we over-communicate with parents" (personal communication, December 21, 2009). Although such concerns were occasionally voiced, the principals were largely in agreement with the results.

### **Domains of Learning Environment**

Each school's NCLB status served as the independent variable, whereas academic expectations, communication, engagement, and safety served as the dependent variables.

**Academic expectations.** Academic expectations served as a domain for which the researcher collected data. The school's NCLB status was largely based on a school's level of academic success. In comparison to the survey initially administered by New York City Public Schools, the current researcher did not make any modifications to the questions in this domain. For this survey, 16 questions related to academic expectations; these questions are included in Table 1.

Table 1. *Survey Questions Related to Academic Expectations*

| Item | Question   |
|------|--|
| 2d   | Curriculum, instruction, and assessment are aligned within and across the grade levels at this school.                             |
| 2e   | The principal places the learning needs of children ahead of other interests.  |
| 3a   | My school has high expectations for all students.  |
| 3b   | Teachers in this school set high standards for students' work in their classes.  |
| 3c   | My school has clear measures of progress for student achievement throughout the year.  |
| 3d   | This school makes it a priority to help students develop and achieve challenging learning goals.                                   |
| 3e   | This school makes it a priority to help students find the best ways to achieve their learning goals.                               |
| 4_1  | Which of the following courses or activities are available to students?<br>1. Offered as a regular course                          |
| 4_2  | Which of the following course or activities are available to students?<br>2. Offered before or after school                        |
| 7a   | The principal has confidence in the expertise of the teachers.   |
| 7g   | School leaders visit classrooms to observe the quality of teaching at this school.   |
| 7i   | School leaders place a high priority on the quality of teaching at this school.  |
| 7j   | Most teachers in my school work together to improve their instructional practice.  |
| 7k   | Teachers in this school use student achievement data to improve instructional decisions.   |
| 8d   | I have sufficient materials to teach my class(es), including books, audio-visual equipment, maps, and calculators (if applicable). |
| 8e   | My instructional materials are in good condition.  |

**Communication.** The second domain of learning environments is communication. The communication section of the survey comprised 10 questions. The researcher modified the original survey with regard to this section. Based upon feedback from participants in Pilot Survey I, language was altered to clarify several questions. Specifically, instead of using the term school leaders, the research modified the survey to read school-based leaders. This change clarified to respondents that the questions were referring to leaders within each school as opposed to the executive leadership from the district's central office. The questions in this section focused on the articulation of a clear vision, trust, and communication with parents. Table 2 presents the survey questions related to communication.

Table 2. *Survey Questions Related to Communication*

| Item | Question  |
|------|---|
| 2a   | School-based leaders (e.g., principal or assistant principal) communicate a clear vision for this school.   |
| 2b   | School-based leaders let staff know what is expected.   |
| 2c   | School-based leaders encourage open communication on important school issues.   |
| 2f   | The principal is an effective manager who makes the school run smoothly.  |
| 2g   | I trust the principal at his or her word.   |
| 7h   | School leaders give me regular and helpful feedback about my teaching.  |
| 9c   | My school communicates effectively with parents when students misbehave.  |
| 11b  | communicated with parents about their children's progress in class?   |
| 11c  | sent parents written information on what you are teaching and what students are expected to learn?  |
| 11d  | sent home information on services to help students or parents such as tutoring, after-school programs, or workshops adults can attend to help their children in school? |

**Engagement.** The third domain of learning environments focused on engagement. The engagement section of the survey included 10 questions. No modifications were made when adapting the New York City Public Schools Learning Environment Survey to the current form of the survey. In general, the questions in the engagement section of the survey focused on student activities, principal support, collaboration, and professional development. The survey questions related to engagement are presented in Table 3.

Table 3. *Survey Questions Related to Engagement*

| Item | Question   |
|------|--|
| 5a   | My school offers a wide enough variety of activities or courses to keep students at my school engaged.   |
| 6a   | To what extent do you feel supported by your principal?  |
| 6b   | To what extent do you feel supported by other teachers at your school?   |
| 7b   | School leaders invite teachers to play a meaningful role in setting goals and making important decisions for the school.                         |
| 7c   | School leaders encourage collaboration among leaders.  |
| 8a   | This year, coordinated via this school, I received helpful training on the use of student achievement data to improve teaching and learning.     |
| 8b   | At this school, the professional development I received this year provided me with content support in my subject area(s).                        |
| 8c   | Via this school, the professional development I received this year provided me with teaching strategies to better meet the needs of my students. |
| 9a   | Obtaining information from parents about students' learning needs is a priority at my school.  |
| 9b   | Teacher and administrators in my school use information from parents to improve instructional practices and meet students' learning needs.       |

**Safety.** The fourth domain within this survey was safety. There were 16 questions that addressed safety. There were no modifications to questions from the original survey to the current survey. The questions within this section generally focused on respect, discipline, violence, and crime. Survey questions related to safety are presented in Table 4.

Table 4. *Survey Questions Related to Safety*

| Item | Question  |
|------|---|
| 7d   | Teachers in this school respect teachers who take the lead in school Improvement efforts.                     |
| 7e   | Teachers in this school trust each other.   |
| 7f   | Teachers in this school recognize and respect colleagues who are the most effective teachers.                 |
| 12a  | Order and discipline are maintained at my school.   |
| 12b  | At my school, I can get help needed to address student behavior and discipline problems.                      |
| 12c  | I am safe at my school.   |
| 12d  | Crime and violence are a problem in my school.  |
| 12e  | Students in my school are often threatened or bullied.  |
| 12f  | Adults at my school are often disrespectful to students.  |
| 12g  | Most students at my school treat teachers with respect.   |
| 12h  | Most parents treat teachers at this school with respect.  |
| 12i  | Students' use of alcohol and illegal drugs is a problem at my school.   |
| 12j  | There are conflicts at my school based on race, culture, religion, sexual orientation, gender, or disability. |
| 12k  | There is a person or program in my school that helps students resolve conflicts.                              |
| 12l  | Gang activity is a problem in my school.  |
| 12m  | My school is kept clean.  |

The 2008 Learning Environment Survey consisted of 56 Likert-type items. The four response categories were *strongly agree*, *agree*, *disagree*, *strongly disagree*;

therefore, they were ordinal in nature. Although inferential statistics, such as ANOVA, require interval level data, Garson (2009) stated that scales used on Likert-type items are often treated as interval data and that Type I and Type II errors are not dramatically increased as a result of this use.

Hinkle, Wiersma, and Jurs (2003) stated that there are three assumptions underlying ANOVA: (a) The observations are random and independent samples from populations, (b) the distributions of the populations from which the samples are selected are normal, and (c) the variances of the distributions in the population are equal. After the survey data were collected, the researcher determined the extent to which these assumptions were satisfied.

To address the first assumption of observations' being random and independent samples from populations, the researcher, based on a logical argument, expected each teacher's response to be independent of the responses of other teachers. Additionally, a frequency distribution for each dependent variable was completed to determine whether any unusual pattern of responses existed. As for the distributions of the populations from which samples were selected being normal, each NCLB status group exceeded 40 respondents, thereby satisfying the assumption of normality via the central limit theorem. In addition, the researcher computed normal probability plots to determine normal distribution of dependent variables. Shapiro-Wilk tests also were computed. To ensure the variances of the distributions in the population were equal, the researcher conducted the Levene Test to determine the homogeneity of variance.

### **Survey Data Analysis**

Given the response rate, the current study well reflected the teacher perceptions at

the six elementary schools. Each school's NCLB status served as the independent variable, whereas academic expectations, communication, engagement, and safety served as the dependent variables. The data for this quantitative research were analyzed using inferential statistics, whereas the responses generated by the open-ended question were coded and analyzed for themes. ANOVA was conducted to determine the difference in academic expectations, communication, engagement, and safety based on school NCLB status. The researcher used inferential statistics to infer the findings from the six schools to the entire school district.

### **Missing Values**

In the event of survey respondents' failing to answer specific questions, the researcher computed an average based on each completed answer. For example, if a respondent answered 14 of 16 academic expectation items, the total score was computed by dividing the sum of answers by 14. This method maximized the number of subjects. In addition, if a respondent failed to answer more than two questions from a domain, the respondent's answers were excluded from that specific domain.

### **Effect Size**

The effect size has been defined as "the degree to which a phenomenon exists" (Hinkle et al., 2003, p. 247). In this research, the effect size was computed for all significant ANOVA analyses to determine the extent to which the learning environments differed between the schools within the three NCLB statuses based on the four dependent variables. Effect sizes provided an additional measure of the magnitude of the difference expressed in standard deviation units in the original measurement (Hinkle et al.).

**Post Hoc Multiple-Comparison Test**

When the null hypothesis was rejected, a post hoc multiple-comparison test was conducted to determine the variances between the various groups. Since the researcher conducted surveys with teachers from six schools, classified into three NCLB statuses, it was unlikely that the group sizes would be even. As a result, the researcher conducted the Tukey/Kramer (TK) method for the post hoc multiple-comparison test. The TK method is utilized when group sizes differ (Hinkle et al., 2003).

## **Chapter IV**

### **Results**

The purpose of this study was to understand how a school's NCLB status impacts teacher perceptions of the learning environment in their school. The following research question was stated in Chapter I: To what extent is there a difference in teachers' perceptions of learning environments at six public schools, with differing NCLB statuses, located in an urban school district? The researcher hypothesized that there would be statistically significant differences in teacher perceptions of learning environment given the school's NCLB status. Initially, preliminary analyses were performed to describe the sample, examine the properties of the composite scores, and check the assumptions of the parametric statistical techniques. That information is presented in this chapter. Second, the results related to differences on the composite scores related to group membership (i.e., participants from schools Not in Need of Improvement, in Corrective Action, or in Restructuring) are presented. In the next section, responses to the open-ended survey question are examined. The chapter concludes with a summary of the key findings from this study.

#### **Participation Rates**

Participation rates for the schools were as follows. At Not in Need of Improvement School A, 16 of 16 (100%) teachers participated in the survey. At Not in Need of Improvement School B, 25 of 31 (81%) teachers completed surveys. At Corrective Action School A, 16 of 17 (94%) teachers completed surveys. At Corrective Action School B, 24 of 29 (83%) teachers completed surveys. At Restructuring School A, 21 of 28 (75%) teachers completed surveys. At Restructuring School B, 24 of 28

(86%) teachers completed surveys. Based on survey completion rates of the teachers in all six schools, an overall participation rate of 84.5% (126 of 149) was calculated.

### **Participating Schools**

Table 5 provides information regarding each school. Even though student and teacher populations varied by approximately 150 students, the percentages of minority students and those who received free or reduced-price lunches remained consistent in all schools. The schools were located in various sections throughout the city and school district.

*Table 5. Characteristics of Participating Schools*

| School                              | Number of teachers | Student population | % of minority students | % of students receiving free or reduced-price lunch |
|-------------------------------------|--------------------|--------------------|------------------------|---|
| Not in Need of Improvement School A | 16                 | 210                | 99%                    | 81%   |
| Not in Need of Improvement School B | 31                 | 362                | 88%                    | 87%   |
| Corrective Action School A          | 17                 | 213                | 100%                   | 98%   |
| Corrective Action School B          | 29                 | 357                | 98%                    | 80%   |
| Restructuring School A              | 28                 | 351                | 100%                   | 100%  |
| Restructuring School B              | 28                 | 341                | 98%                    | 96%   |

### **Teachers in Not in Need of Improvement Schools**

Table 6 displays the demographic information for teachers in schools that were classified as Not in Need of Improvement. The demographic information regarding teachers in Not in Need of Improvement schools varied greatly. The majority of the

respondents in this set of schools were African American (74%). In alignment with historical trends, the overwhelming percentage of elementary school teachers in this set were female (88%). Analysis of the length of service for teachers in schools Not in Need of Improvement revealed that approximately 47% of teachers had taught for a period that exceeded 15 years. The remaining teachers' years of experience varied.

Table 6. *Demographics of Teachers in Not in Needs of Improvement Schools*

| Demographic information         | Number of teachers |
|---------------------------------|--------------------|
| <b>Ethnicity</b>                |                    |
| White                           | 7                  |
| Black (Not of Hispanic descent) | 23                 |
| Hispanic                        | 0                  |
| Asian                           | 1                  |
| No response                     | 10                 |
| <b>Gender</b>                   |                    |
| Male                            | 4                  |
| Female                          | 30                 |
| No response                     | 7                  |
| <b>Experience</b>               |                    |
| Less than 1 year                | 3                  |
| 1-3 years                       | 6                  |
| 4-10 years                      | 7                  |
| 11-15 years                     | 2                  |
| More than 15 years              | 16                 |
| No response                     | 7                  |

### **Teachers in Corrective Action Schools**

Table 7 displays the demographics of teachers in Corrective Action schools. Of

these respondents, 63% were African American. Whereas 47% of the teachers in Not in Need of Improvement schools reported more than 15 years of experience, only 40% (14 of 35) teachers in Corrective Action schools reported more than 15 years of experience. The numbers of teachers who did not respond were consistent among the groups of schools.

Table 7. *Demographics of Teachers in Corrective Action Schools*

| Demographic information         | Number of teachers |
|---------------------------------|--------------------|
| <b>Ethnicity</b>                |                    |
| White                           | 6                  |
| Black (Not of Hispanic descent) | 19                 |
| Hispanic                        | 3                  |
| Asian                           | 2                  |
| No response                     | 10                 |
| <b>Gender</b>                   |                    |
| Male                            | 2                  |
| Female                          | 33                 |
| No response                     | 5                  |
| <b>Experience</b>               |                    |
| Less than 1 year                | 7                  |
| 1-3 years                       | 2                  |
| 4-10 years                      | 5                  |
| 11-15 years                     | 7                  |
| More than 15 years              | 14                 |
| No response                     | 5                  |

### **Teachers in Restructuring Schools**

Table 8 displays the demographics of teachers in Restructuring schools. Of the

teachers who responded to the survey, 93% were African American. As with the schools Not in Need of Improvement and in Corrective Action, the respondents in Restructuring schools were predominantly female (80%). One of the major differences existed within the experience levels of teachers. Unlike the previous two groups, the largest percentage of teachers in Restructuring schools were not in the category of more than 15 years. The largest percentage of teachers, 16 of 38 (42%), reported between 4 and 10 years of experience.

Table 8. *Demographics of Teachers in Restructuring Schools*

| Demographic information         | Number of teachers |
|---------------------------------|--------------------|
| Ethnicity                       |                    |
| White                           | 6                  |
| Black (Not of Hispanic descent) | 30                 |
| Hispanic                        | 2                  |
| Asian                           | 1                  |
| No response                     | 5                  |
| Gender                          |                    |
| Male                            | 7                  |
| Female                          | 35                 |
| No response                     | 3                  |
| Experience                      |                    |
| Less than 1 year                | 3                  |
| 1-3 years                       | 5                  |
| 4-10 years                      | 16                 |
| 11-15 years                     | 3                  |
| More than 15 years              | 11                 |
| No response                     | 4                  |

## Preliminary Analyses

**Composite scores.** The next step in the analysis was to compute composite scores for academic expectations, communication, engagement, and safety. Table 9 presents descriptive statistics for these composite scores. Not every participant received a score for each of the four scales due to missing data. The score for each participant is the mean of the item scores for each scale; participants were allowed up to two missing data points on a scale. That is, if a participant had three or more missing data points for a particular scale, no score was computed. The items constituting each scale were recoded so that a score of 1 indicated a negative perception and a score of 4 indicated a positive perception. Therefore, higher scores and means are indicative of higher academic expectations, better communication, more engagement, or higher levels of safety.

Cronbach's alpha internal consistency reliability coefficients were computed for the composite scores; all were adequate: .92 for academic expectations, .85 for communication, .90 for engagement, and .84 for safety. Table 10 depicts the correlations among the four composite scores. All of these correlations were statistically significant ( $p < .001$ ) and positive. The highest correlation was between the academic expectations score and the engagement score ( $r = .87$ ), whereas the lowest correlation was between the communication score and the safety score ( $r = .49$ ). The positive correlations indicate that participants who had high scores on one scale also tended to have high scores on the other scales, and vice versa.

Table 9. *Descriptive Statistics for Composite Scores*

| Score                 | Item | <i>n</i> | Min. | Max. | <i>M</i> | <i>SD</i> | $\alpha$ |
|-----------------------|------|----------|------|------|----------|-----------|----------|
| Academic expectations | 14   | 119      | 1.86 | 4.00 | 3.28     | .51       | .92      |
| Communication         | 10   | 106      | 1.40 | 4.00 | 3.12     | .52       | .85      |
| Engagement            | 10   | 117      | 1.50 | 4.00 | 3.11     | .58       | .90      |
| Safety                | 16   | 115      | 2.25 | 3.94 | 3.19     | .37       | .84      |

*Note.* The items composing each scale were recoded so that 1 = *least positive perception* and 4 = *most positive perception*. Therefore, higher scores and means are indicative of higher academic expectations, better communication, more engagement, or higher levels of safety.

Table 10. *Correlations Among Composite Scores*

| Score                    | Academic expectations | Communication | Engagement | Safety |
|--------------------------|-----------------------|---------------|------------|--------|
| 1. Academic expectations | 1.00                  |               |            |        |
| 2. Communication         | .74*                  | 1.00          |            |        |
| 3. Engagement            | .87*                  | .79*          | 1.00       |        |
| 4. Safety                | .59*                  | .49*          | .59*       | 1.00   |

$p < .001$ .

### **Assumptions**

Three assumptions for the use of ANOVA techniques in the current study were highlighted in Chapter III: (a) The observations are random and independent samples from populations, (b) the distributions of the populations from which the samples are

selected are normal, and (c) the variances of the distributions in the population are equal. As noted in Chapter III, it was expected that the first assumption would be met because each teacher's responses are assumed to be independent of the responses of the other teachers. The second assumption was likely to be met because there were greater than 30 participants in each group (36 participants from schools Not in Need of Improvement, 40 subjects from schools in Corrective Action, and 44 subjects from schools in Restructuring); the central limit theorem states that as sample size increases, the sampling distribution of the mean approaches normality.

Despite the fact that the central limit theorem offers some assurance that the sampling distribution of the mean for each composite score approximated normality, histograms and normal probability plots were created for each of the four composite scores. The histograms are shown in Appendix B, and the normal probability plots are shown in Appendix C. The histogram for the academic expectations score deviated substantially from normality, whereas the histograms for the communication, engagement, and safety scores more closely approximated normality. The normal probability plots also show some deviation from normality for the academic expectations score but not for the communication, engagement, or safety scores.

Shapiro-Wilk tests for normality were also computed. Table 11 shows the results of these tests along with the skewness and kurtosis values for the four composite scores. There was statistically significant nonnormality for the academic expectations ( $p < .001$ ), communication ( $p = .011$ ), and engagement scales ( $p = .002$ ), but not for safety scores ( $p = .213$ ). None of the skewness or kurtosis values exceeded 1.00 in absolute value. To test for inequality in variance across the three groups, the Levene test was employed.

The result was statistically significant for academic expectations scores ( $p = .002$ ) and engagement scores ( $p = .036$ ), but not for communication ( $p = .332$ ) or safety scores ( $p = .844$ ).

Table 11. *Examination of the Normality of the Composite Scores*

| Score                 | Shapiro-Wilk Test |           |          | Skewness | Kurtosis |
|-----------------------|-------------------|-----------|----------|----------|----------|
|                       | Statistic         | <i>df</i> | <i>p</i> |          |          |
| Academic expectations | .95               | 119       | < .001   | -.45     | -.59     |
| Communication         | .97               | 1.6       | .011     | -.68     | .64      |
| Engagement            | .96               | 117       | .002     | -.57     | .00      |
| Safety                | .99               | 115       | .213     | -.29     | -.23     |

### **Group Differences in Perceptions of the Learning Environment**

The next set of analyses consisted of the calculation of four one-way ANOVAs comparing scores on the four composite variables among the three groups (participants from schools classified as Not in Need of Improvement, in Corrective Action, or in Restructuring). Table 12 shows the means on the four composite variables as a function of group membership.

Table 12. *Mean Composite Scores as a Function of Group*

| Score                 | Not in Need of Improvement<br>( <i>n</i> = 36) | Corrective Action<br>( <i>n</i> = 40) | Restructuring<br>( <i>n</i> = 44) |
|-----------------------|--|---------------------------------------|-----------------------------------|
| Academic expectations | 3.40 (.48)                                     | 3.15 (.68)                            | 3.31 (.40)                        |
| Communication         | 3.35 (.39)                                     | 3.02 (.54)                            | 3.05 (.55)                        |
| Engagement            | 3.26 (.45)                                     | 2.92 (.69)                            | 3.15 (.53)                        |
| Safety                | 3.27 (.38)                                     | 3.20 (.38)                            | 3.12 (.33)                        |

*Note.* Standard deviations are in parentheses.

The first ANOVA compared academic expectations scores among the three groups. The result was not statistically significant,  $F(2, 116) = 2.38, p = .097, \eta^2 = .04$ . Therefore, it can be concluded that the academic expectations scores for participants from schools in Not in Need of Improvement ( $M = 3.26, SD = .45$ ), for participants from schools in Corrective Action ( $M = 2.92, SD = .69$ ), and for participants from schools in Restructuring ( $M = 3.15, SD = .53$ ) did not differ.

The second ANOVA employed communication scores as the dependent variable. In this analysis, the group difference was statistically significant,  $F(2, 103) = 4.32, p = .016, \eta^2 = .08$ . Based on the statistically significant ANOVA, follow-up tests were performed with the Tukey/Kramer test. The results indicated that participants from schools Not in Need of Improvement had higher scores on the communication scale ( $M = 3.35, SD = .39$ ) than did participants from schools in Corrective Action ( $M = 3.02, SD = .54, p = .023$ ) and participants from schools in Restructuring ( $M = 3.05, SD = .55, p = .038$ ). Communication scores of participants from schools in Corrective Action and participants from schools in Restructuring did not differ,  $p = .969$ .

The ANOVA performed with engagement scores as the dependent variable was also statistically significant,  $F(1, 114) = 3.64, p = .029, \eta^2 = .06$ . Post hoc tests indicated that participants from schools Not in Need of Improvement had higher engagement scores ( $M = 3.26, SD = .45$ ) than did participants from schools in Corrective Action ( $M = 2.92, SD = .69, p = .027$ ). Engagement scores for participants from schools Not in Need of Improvement, however, did not differ significantly from the scores of participants from schools in Restructuring ( $M = 3.15, SD = .53, p = .673$ ). In addition, scores of participants at schools in Corrective Action did not differ from scores of participants at

schools in Restructuring,  $p = .155$ .

The final ANOVA compared the safety scores for participants from the three groups. The result of this test was not statistically significant,  $F(1, 112) = 1.71, p = .185, \eta^2 = .03$ . This finding indicates that the safety scores from participants at schools Not in Need of Improvement ( $M = 3.27, SD = .38$ ), from participants at schools in Corrective Action ( $M = 3.20, SD = .38$ ), and from participants at schools in Restructuring ( $M = 3.12, SD = .33$ ) did not differ.

### Supplemental Analyses

Due to the violation of some of the assumptions of the aforementioned parametric ANOVAs, a supplemental set of analyses was performed. This analysis consisted of a series of Kruskal-Wallis tests in place of the one-way ANOVAs, with Mann-Whitney follow-up tests in place of the Tukey/Kramer tests. The results from the Kruskal-Wallis tests are shown in Table 12. The three groups differed in terms of communication scores,  $\chi^2(2) = 7.41, p = .025$ , but not in terms of academic expectations,  $\chi^2(2) = 2.96, p = .228$ , engagement scores,  $\chi^2(2) = 4.78, p = .092$ , or safety scores,  $\chi^2(2) = 4.63, p = .099$ .

Table 12. *Results of Kruskal-Wallis Tests*

| Score                 | $\chi^2$ | $df$ | $p$  |
|-----------------------|----------|------|------|
| Academic expectations | 2.96     | 2    | .228 |
| Communication         | 7.41     | 2    | .025 |
| Engagement            | 4.78     | 2    | .092 |
| Safety                | 4.63     | 2    | .099 |

Post hoc Mann-Whitney tests were then conducted for the communication scores based on the statistical significance of the Kruskal-Wallis test; Table 13 shows the

results. Schools Not in Need of Improvement differed from both schools in Corrective action,  $z = -2.53$ ,  $p = .011$ , and schools in Restructuring,  $z = -2.24$ ,  $p = .025$ . Schools in Corrective Action did not differ from schools in Restructuring,  $z = -.31$ ,  $p = .751$ .

Therefore, the results from the analysis of communication scores using nonparametric statistical techniques were the same as the results from the parametric techniques:

Participants from schools Not in Need of Improvement had higher scores on the Communication scale than did participants from schools in Corrective Action or participants from schools in Restructuring, whereas communication scores for participants from schools in Corrective Action and participants from schools in Restructuring did not differ. The result from the nonparametric tests on the Academic Expectations scores and on the safety scores were also the same for the parametric and nonparametric tests. The only difference between the parametric and nonparametric tests was that the parametric tests indicated that engagement scores were higher for participants from schools Not in Need of Improvement than for participants from schools in Corrective Action, whereas the nonparametric tests found no such difference.

Table 13. *Results of Mann-Whitney Tests for Communication Scores*

| Comparison   | $z$   | $p$  |
|--|-------|------|
| Schools Not in Need of Improvement versus schools in Corrective Action | -2.53 | .011 |
| Schools Not in Need of Improvement versus schools in Restructuring     | -2.24 | .025 |
| Schools in Corrective Action versus schools in Restructuring           | -.31  | .751 |

### **Analysis of Qualitative Responses**

The survey contained one open-ended question: How do you feel that your school's NCLB status affects you? A total of 47 of the 120 participants (39.2%) provided a response to this question, and Table 14 presents a summary of the responses. The 47 participants provided a total of 61 responses to the open-ended question; the percentages in Table 14 are based upon the number of participants who provided a response (i.e., 47). The most common theme to emerge (identified by 21.3% of the participants who responded to the open-ended question) was that NCLB status had a negative effect through an increased emphasis on teaching to the test as opposed to teaching so that students will learn. One teacher stated, "It creates an environment where teachers are focusing to meet testing goals and not placing an emphasis on good instruction," whereas another noted that "it has been a failure because teachers are forced to teach to a test."

The second most common type of response was a general statement that NCLB or the school's NCLB status had a negative effect (stated by 14.9% of the participants who responded to the open-ended question,  $n = 7$ ). Examples of responses in this category included "It is not effective" and "Generally, I think that NCLB is a joke and I don't take it seriously."

Another common theme was that NCLB or the school's NCLB status had a positive effect by motivating teachers to do a better job (12.8%,  $n = 37$ ). One teacher stated, "Though I might not agree with all aspects of NCLB; it has made me a more focused teacher," whereas another stated, "It can be stressful worrying about my job but it is also something that pushes me to strive harder for the students."

Other common responses were that the school's NCLB status had no effect

(10.6%,  $n = 37$ ), had a negative effect on job security (10.6%,  $n = 37$ ), had a negative effect through an increased workload or more pressure on teachers (10.6%,  $n = 37$ ), had a negative effect on special education students (10.6%,  $n = 37$ ), elicited a general feeling that NCLB was a misguided approach (10.6%,  $n = 37$ ), had a positive effect on student achievement (4.3%,  $n = 37$ ), had a negative disruptive effect on learning (4.3%,  $n = 37$ ), had a negative effect on prekindergarten teachers and students (4.3%,  $n = 37$ ), or had resulted in structural changes in teaching (4.3%,  $n = 37$ ).

Table 14. *Summary of Results from Qualitative Analysis of Open-Ended Question*

| Theme  | Frequency | Percentage |
|--|-----------|------------|
| Negative effect through emphasizing teaching to the test | 10        | 21.3       |
| General negative effect                                  | 7         | 14.9       |
| Positive effect by increased teaching motivation         | 6         | 12.8       |
| No effect  | 5         | 10.6       |
| Negative effect on job security                          | 5         | 10.6       |
| Negative effect on teaching work load/increased pressure | 5         | 10.6       |
| Negative effect on special education students            | 5         | 10.6       |
| NCLB is misguided  | 5         | 10.6       |
| Positive effect on student achievement                   | 3         | 6.4        |
| Negative disruptive effect                               | 2         | 4.3        |
| Negative effect on prekindergarten students or teachers  | 2         | 4.3        |
| Structural changes                                       | 2         | 4.3        |

Responses to the open-ended questions were also examined as a function of group; this breakdown is shown in Table 15. Teachers at schools Not in Need of Improvement tended to give positive responses, indicated by the fact that 18.2% ( $n = 11$ ) of the teachers in this group stated that NCLB had a positive effect on student

achievement compared to none of the teachers at schools in Corrective Action and only 6.3% ( $n = 16$ ) of teachers at schools in Restructuring. Teachers at schools in Corrective Action were much more likely to provide a general statement that the effect was negative (30.0%,  $n = 10$ ) compared to teachers at schools Not in Need of Improvement (0.0%) and teachers at schools in Restructuring (6.3%,  $n = 16$ ). Teachers at schools in Restructuring were more likely to think that NCLB status had a negative effect by emphasizing teaching to the test (31.3%,  $n = 16$ ) than were teachers at schools in Corrective Action (20.0%,  $n = 10$ ) and teachers at schools Not in Need of Improvement (9.1%,  $n = 11$ ). Teachers at schools in Corrective Action were also more likely to think that the entire NCLB approach was misguided (25.0%,  $n = 10$ ) than were teachers at schools Not in Need of Improvement (0.0%) or teachers at schools in Restructuring (0.0%).

One positive effect of NCLB status perceived by teachers at schools in Restructuring was that teacher motivation was improved (25.0%,  $n = 16$ ); this belief was held by none of the teachers at schools in Corrective Action and 18.2% ( $n = 11$ ) of teachers at schools Not in Need of Improvement. Teachers at schools in Restructuring were also more likely to think that NCLB status increased pressure and workload (25.0%,  $n = 16$ ) than were teachers at schools in Corrective Action (5.0%,  $n = 10$ ) or teachers at schools Not in Need of Improvement (0.0%).

### Summary of Findings

This chapter has presented the results of the analyses conducted to address the research question of this study. These analyses produced the following conclusions:

- There were no differences among the three types of schools in terms of teachers' academic expectations.

- There were no differences among the three types of schools in terms of teachers' perceptions of the safety of the school.
- Parametric analyses indicated that teachers from schools Not in Need of Improvement perceived better communication than did teachers from schools in Corrective Action or from schools in Restructuring; however, the nonparametric tests failed to confirm this conclusion.
- Both the parametric analyses and the nonparametric analyses indicated that teachers from schools Not in Need of Improvement perceived higher levels of engagement than did teachers from schools in Corrective Action.
- Analysis of the open-ended questions indicated that teachers tended to perceive that (a) NCLB resulted in teaching to the test at the expense of truly educating students, (b) NCLB status produced a generally negative effect on students and teachers, and (c) NCLB status had one positive effect: increased teacher motivation.
- There were some differences among the three groups in terms of responses to the open-ended question: Teachers at schools Not in Need of Improvement tended to give more positive and fewer negative responses; teachers at schools in Restructuring were more likely to think that NCLB status produced a negative effect by emphasizing teaching to the test and caused teacher pressure and workload to increase, but that teacher motivation also increased; teachers at schools in Corrective Action were more likely to think that the entire NCLB approach was misguided.

The next chapter presents a discussion of these findings, an integration of these

findings into past research in this area, and recommendations for educational practice and future research.

## Chapter V

### Interpretations, Conclusions, and Recommendations

#### Introduction

The goal of the No Child Left Behind Act of 2001 is to ensure that all students, regardless of racial composition or economic disparities, are proficient in mathematics and reading by 2014. With sanctions imposed on schools that fail to meet their academic targets on annual standardized tests, schools are being labeled. To date, no state is on track to obtain the 2014 academic goals (Rebell & Wolf, 2008). The labels, Schools in Need of Improvement, Corrective Action, and Restructuring, are negatively perceived by the community at large. By examining teacher perceptions regarding learning environments of schools with differing NCLB statuses, the researcher was able to generate empirical data regarding learning environments, based on the NCLB status of a school.

Based on the findings, there were no significant differences in schools' academic expectations and safety, regardless of the school's NCLB status. There were significant differences in communication and engagement according to schools' NCLB statuses. With regard to the open-ended question, common themes emerged based on the schools' NCLB statuses.

The researcher hypothesized that a school's learning environment is adversely impacted by its NCLB status. Findings related to academic expectations and safety do not support the researcher's hypothesis, whereas findings related to communication and engagement partially support the researcher's hypothesis. Overall, responses to the open-ended question support the hypothesis.

According to the deficit theory (Valencia, 1997), teachers have an increasingly poor perception of their learning environment as the NCLB designation of their school becomes more severe. Even though the deficit theory supports this thinking in some areas within this research, the overall results of the study do not support the deficit theory.

## **Discussion**

Research Question 1: To what extent is there a difference in teachers' perceptions of learning environments at six public schools, with differing NCLB statuses, located in an urban school district?

By conducting an ANOVA on each dependent variable that supports learning environments within schools, the researcher was able to determine the extent to which each variable impacted the learning environment of the schools within each NCLB sanction group. The dependent variables included academic expectations, communication, engagement, and safety. An open-ended question also was analyzed. This analysis provided the researcher with information regarding the impact of a school's NCLB status on teachers.

**Participant demographic discussion.** Comparison of the demographic information for the three groups of schools revealed that respondents' ethnicity and gender were relatively consistent. Comparison of respondents' levels of experience based on NCLB status resulted in a pattern. According to the data, schools Not in Need of Improvement had the greatest percentage of teachers with more than 15 years of experience (47%), followed by Corrective Action schools (40%). The percentage of teachers with more than 15 years of experience was the lowest (29%) in Restructuring

schools. This lack of experience among the teaching staff may have contributed to the school's academic achievement level. In previous research comparing academic achievement with teacher certification, researchers concluded that 97% of classes in high-poverty districts were not being taught by highly qualified teachers (Smith & Gorard, 2007). Assuming that teacher certification is indicative of teacher quality and that less experienced teachers are more prevalent in high-poverty schools, healthy learning environments are more difficult to achieve based on these contributing factors.

### **Academic Expectations**

The No Child Left Behind Act of 2001 has been designed to ensure that all students will be proficient in mathematics and reading by 2014. Although teacher certification and attendance rates are scrutinized, a school's academic achievement is the primary focus of NCLB. In an attempt to achieve the academic targets, teachers alter their instructional practices by focusing on the content covered on standardized examinations (Abrams et al., 2003; Stecher & Barron, 2001). Due to the great emphasis placed on academic achievement, the researcher believes that the dependent variable of academic expectations takes priority over the remaining dependent variables in gauging the academic success of a school.

Analysis of teacher survey results indicated that academic expectations in the schools from differing NCLB designations were not significantly different. Teachers in schools that occupied the NCLB designations of Not in Need of Improvement, Corrective Action, or Restructuring were similar in their perceptions of academic expectations for their students. Due to the ramifications of sanctions' being imposed on schools, the

researcher believes that the teaching staffs in schools understand the importance of achieving NCLB academic targets. As a result, making AYP via establishing high academic expectations becomes the primary focus of every school, regardless of NCLB designation. Additionally, the designation of Corrective Action and Restructuring requires schools to create school improvement plans that outline their strategy for meeting academic targets. This mandate helps to emphasize the importance of high academic expectations, especially in the schools impacted by NCLB designations.

### **Communication**

As a part of the communication domain of the survey, the level of communication was determined by measuring the number of academic- and behavior-related conversations teachers had with students and parents over an extended period of time. Esposito (1999) concluded that healthy student–teacher relationships play a major role in improving student achievement and developing healthy school cultures (Gruenart, 2005; Rodriguez, 2008). In addition to examining relationships, the survey measured communication levels by analyzing the articulation of a clear vision by school-based leaders. Communication plays a critical role in a school’s learning environment.

Examination of the communication levels of the schools with varying NCLB designations indicated a significant difference between schools that were Not in Need of Improvement and the remaining groups. The difference in levels of communication between Corrective Action and Restructuring schools was not significant.

The researcher believes that solid communication levels support healthy learning environments. Consequently, the failure of Corrective Action and Restructuring schools to create effective avenues for communication and articulation may have hindered their

schools' ability to achieve NCLB's academic target. Furthermore, the overall learning environments within these schools may have suffered due to substandard lines of communication. According to the results, schools Not in Need of Improvement understood the importance of creating effective channels for communication. The findings were consistent when using either parametric or nonparametric tests.

### **Engagement**

The school's ability to engage both teachers and students in activities to support the learning environment of the school contributes to academic achievement. In 1999, Esposito concluded that healthy relationships play a critical role in developing a strong school culture. The survey used in this study measured the levels of engagement by assessing school-teacher collaboration and activities available for students. In 2003, Lee and Burkam highlighted the importance of a variety of course offerings for student success. As a result, this researcher perceives the variety of activities and classes to play a critical role in the school environment.

When a parametric test was conducted, the results indicated a significant difference existed in the levels of engagement between schools Not in Need of Improvement and the remaining two categories of schools. With regard to engagement levels in Corrective Action and Restructuring schools, there was no significant difference between the categories. Unlike the findings for communication, the use of nonparametric tests found no definitive differences in level of engagement among the NCLB statuses.

Based upon the results of nonparametric tests, significant differences did not exist among the groups. Although the researcher believes that levels of engagement are important, the findings are inconclusive. The parametric and nonparametric findings are

contradictory.

### **Safety**

By using survey data collection methods, the researcher measured the levels of safety in each group of schools. Indicators of safety included student–teacher respect, gang violence, bullying, and peer mediation. According to the results of the survey, there were no significant differences in levels of safety among the groups of schools, regardless of NCLB status. The researcher believes that although elementary schools differ in their culture of safety, less variation exists among elementary schools compared to middle or high schools. For example, bullies exist in second grade; however, the likelihood of active bullying exists at greater levels in eighth grade. The researcher understands the role that safety plays in the learning environment of schools. The fact that significant differences were not detected among the groups may be more indicative of age-appropriate behaviors demonstrated by elementary-age students than of institutions’ having worked to establish environments that excel in the domain of safety. Both parametric and nonparametric tests were consistent in their findings.

### **Qualitative Findings**

The qualitative responses to the survey provided insight into how teachers perceived NCLB and its effect on them. Primarily, teachers of schools Not in Need of Improvement stated that they were not affected by their schools’ NCLB status and perceived that student achievement benefited from NCLB. Teachers in schools in Corrective Action, however, did not provide positive feedback as it related to NCLB, and teachers in Restructuring schools were very much opposed to NCLB with regard to job security and instructional practices.

Based on the collected feedback, the researcher understands the trends associated with teachers in schools in the three NCLB statuses. Teachers in schools Not in Need of Improvement did not share the same concern with NCLB as teachers in schools where sanctions had been imposed. Even though the quantitative data show that schools at all three levels of NCLB status had similarly high academic expectations, the qualitative data indicate that NCLB made academic achievement more challenging, possibly due to the test-taking culture that was created. From a motivational perspective, teachers in both Not in Need of Improvement and Restructuring schools appeared to be motivated. Taking all data into consideration, the researcher believes the motivation was due to different factors. For teachers at Not in Need of Improvement schools, academic success had been rewarded, and teachers wanted to continue receiving recognition. For Restructuring schools, teachers' motivation was based in fear. These teachers feared the consequences associated with not making academic growth, which could include the loss of their jobs.

### **Theoretical Framework**

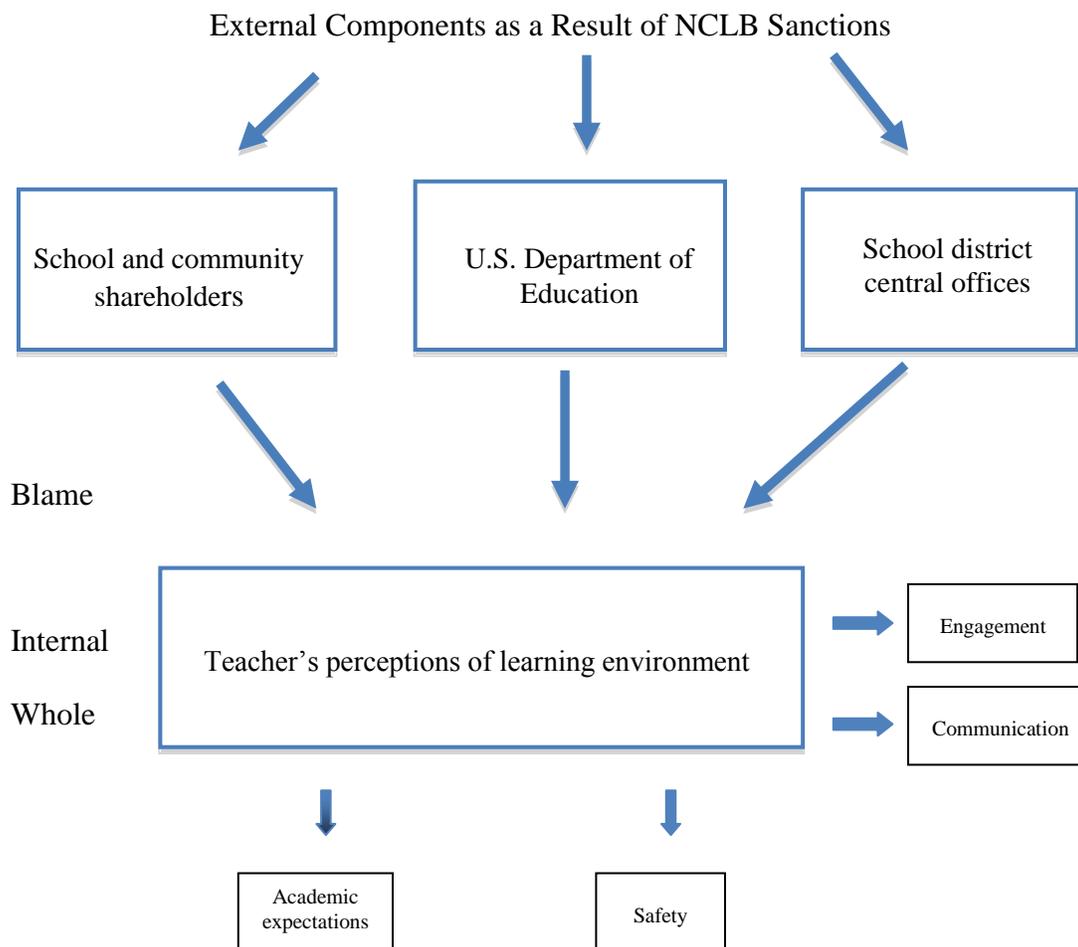
When applied to this study, Valencia's (1997) deficit theory suggests that teachers would have increasingly negative perceptions of their school according to the severity of sanctions. As significant differences were not discovered for the dependent variables of academic expectations and safety, teachers' perceptions did not support this theory.

In the analysis of communication and engagement, teachers' perceptions partially supported the deficit theory. When the schools' designation status changed from Not in Need of Improvement to Corrective Action, the teachers' perceptions related to communication and engagement also worsened. This dynamic supports the deficit

theory.

Even though communication and engagement reflected significant differences in teacher perceptions between schools that were Not in Need of Improvement and those in Corrective Action, schools in Corrective Action and those in Restructuring were not significantly different with regard to communication and engagement. These findings do not support the deficit theory. The researcher created a visual representation of the findings as they related to deficit theory, which is depicted in Figure 2.

When analyzing the impact of NCLB sanctions on learning environments using the framework suggested by deficit theory, policymakers should note the unintended consequences of NCLB sanctions. Even though the results of this research support the notion of Restructuring schools' being motivated to meet academic targets, feelings regarding other components of the school environment appear to be negatively impacted.



*Figure 2.* Model of the deficit theory as applied to current study.

**Limitations to the Study**

This study was conducted in an urban school district serving fewer than 70,000 students. As a result of the researcher's collecting data only through surveys, information that may have been obtained through interviews or record reviews failed to be understood. Although the total number of participating teachers was 126, a more comprehensive understanding of the topic might have been achieved with a larger sample size. In addition, a large sample size would have decreased the chance of Type I errors.

As stated, this research was conducted in six schools in a mid-sized urban district. Even though urban districts exist throughout the country, the district studied had been often berated publicly, especially its poor performing schools. This dynamic may have intensified the teachers' feelings regarding their respective schools, thereby resulting in a unique situation. This uniqueness may have hindered the researcher's ability to apply the findings to other school districts, even urban districts.

**Generalizability**

With NCLB sanctions' being mandated for schools across the country, it is in the best interest of school leaders to understand the importance of this study. Each public school has an NCLB designation and based on the results of this study, the NCLB status impacts the learning environment in various ways. Therefore, information learned in this study should be applied only to schools within the urban district from which these data were collected.

The teacher and student demographics of the participating schools were representative of the teachers and the student body of the entire school district. Even though this district possessed characteristics similar to those of schools throughout the

country, the researcher recommends that the results obtained from this study be applied only to this specific school district.

### **Recommendations**

Creating a quality learning environment within a school is critical to the school's success. The foundation for a school's academic success is firmly rooted in a healthy school culture. In this study, teachers' perceptions provided insight into four domains that form a school's learning environment. Although this study contributes to the literature on learning environments, future researchers may want to consider the following recommendations.

Recommendation One: Conduct a qualitative study that includes interviewing teachers.

Although a robust survey was used to collect data from teachers, qualitative data collection via interviews may provide a more comprehensive understanding of learning environments in schools. In collecting data via surveys, answers are limited based upon the format of surveys, whereas interviews allow respondents to answer questions more freely. Use of interviews may result in a more accurate description of the strengths, weaknesses, and differences of learning environments.

Recommendation Two: Expand the study to include additional stakeholders.

This study focused solely on the perceptions of teachers related to learning environments within schools. Schools are composed of various stakeholders including teachers, administrators, students, parents, educational aides, custodial staff, and others. Although the perceptions of teachers are critical in gauging an understanding of the learning environments of schools, teachers represent only one of numerous types of

stakeholders. Conducting the survey with multiple types of stakeholders would provide a more comprehensive understanding of the complexities associated with school learning environments.

Recommendation Three: Conduct a study that focuses solely on academic expectations.

Although this study examined four dependent variables, academic expectations may be perceived as the most important. There is a correlation between high academic expectations and a school's academic success. With additional research on the domain of academic expectations, researchers may gain empirical insight toward improving learning environments in all schools. After all, academic achievement is the determining factor with regard to the NCLB status of a school.

Recommendation Four: Conduct a study that examines levels of engagement.

Based upon the conflicting results of the parametric and nonparametric tests, it is a worthy endeavor to conduct a study that provides conclusive evidence regarding levels of engagement. Whereas engagement was one of four domains examined in this research, future researchers could gain an accurate understanding of the impact of engagement on school learning environments through the further study of levels of engagement.

Recommendation Five: Conduct a regression analysis of the domains within the learning environment survey.

Results from the survey were used to make conclusions regarding the domains of the learning environment addressed through the survey; however, ANOVAs resulted in broad conclusions. Conducting a regression analysis would provide more specific data

regarding the level of impact of NCLB sanctions on the four domains of the learning environment.

Recommendation Six: Conduct a study that focuses on principals' perceptions of the learning environments within their respective schools.

Results from the current study examined teachers' perceptions of the learning environment as related to their respective schools' NCLB statuses. As the leader of a school, a principal may possess a different perception of the learning environment within the school. Understanding the perception of the school leader may provide insight into the rationale for various school policies in place. Comparing the perceptions of the staff and principal could provide a comprehensive understanding of the learning environment of a school.

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## Appendix A: Learning Environment Survey

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GWU Class of 2010

September 6, 2009

Dear Teacher of \_\_\_\_\_ Elementary School,

This survey is not affiliated with the mission of the District of Columbia Public Schools. My research, "The impact of NCLB sanctions on learning environments of schools", examines teachers' perceptions regarding the learning environment of schools as they relate to your school's NCLB status. Even though your school may not be directly impacted by an NCLB status, your completion and feedback to the survey would be outstanding for the development of my study. The survey should take between 10-15 minutes to complete. The last question on the survey is an open-ended question so a typed response is required if you choose to answer the question.

Although your completion of the survey is greatly appreciated, it is completely voluntary. Even if you agree to participate in the survey, you are permitted to withdraw from the study at any time, without consequence. The results of the survey will be strictly confidential. Upon your completion of the survey, you will click on the "done" button. Clicking on the "done" button will submit the survey without your name. As a result, I will only be able to determine the number of people who submitted the survey, but will be unable to determine the actual names of the participants in the survey. The tallied results, excluding the names of participants, will be shared with your principal. The results of the survey will be secured in a confidential location for a period of three years, before being destroyed. Your honesty in answering the questions is greatly appreciated. If you have questions about the consent process or your rights as a research subject, please contact the George Washington University Office of Human Research at 202-994-2995, Dr. Randolph Mitchell at 703-299-0198, or myself at 202-288-0092. Again, thank you for completing the survey.

1. Do you agree to participate in the survey?

\_\_\_ Yes (If you agree to participate, please push the "next" button)

\_\_\_ No (If you do not agree to participate, please exit the survey)

2. How much do you agree or disagree with the following statements about your school?

|   | Strongly Agree        | Agree                 | Disagree              | Strongly Disagree     |
|---|-----------------------|-----------------------|-----------------------|-----------------------|
| a. School-based leaders (example-Principal/asst. principal) communicate a clear vision for this school.   | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| b. School-based leaders let staff know what is expected.  | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| c. School-based leaders encourage open communication on important school issues.                          | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| d. Curriculum, instruction, and assessment are aligned within and across the grade levels at this school. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| e. The principal places learning needs of children ahead of other interests.                              | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| f. The principal is an effective manager who makes the school run smoothly.                               | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| g. I trust the principal at his or her word.  | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

3. How much do you agree or disagree with the following statements?

|  | Strongly Agree        | Agree                 | Disagree              | Strongly Disagree     |
|--|-----------------------|-----------------------|-----------------------|-----------------------|
| a. My school has high expectations for all students.                               | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| b. Teachers in this school set high standards for students' work in their classes. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

c. My school has clear measures of progress for student achievement throughout the year.

d. This school makes it a priority to help students develop and achieve challenging learning goals.

e. This school makes it a priority to help students find the best ways to achieve their learning goals.

4. Which of the following courses or activities are available to students at your school- and are available during the day?

|                                   | Offered as a regular<br>school activity/course | Offered before or after<br>school or during free<br>periods | Not offered<br>at all |
|-----------------------------------|--|---|-----------------------|
| a. Art                            | <input type="radio"/>                          | <input type="radio"/>                                       | <input type="radio"/> |
| b. Music                          | <input type="radio"/>                          | <input type="radio"/>                                       | <input type="radio"/> |
| c. Dance                          | <input type="radio"/>                          | <input type="radio"/>                                       | <input type="radio"/> |
| d. Theater                        | <input type="radio"/>                          | <input type="radio"/>                                       | <input type="radio"/> |
| e. Foreign Language               | <input type="radio"/>                          | <input type="radio"/>                                       | <input type="radio"/> |
| f. Computer Skills/<br>Technology | <input type="radio"/>                          | <input type="radio"/>                                       | <input type="radio"/> |
| g. Health                         | <input type="radio"/>                          | <input type="radio"/>                                       | <input type="radio"/> |
| h. Physical Education             | <input type="radio"/>                          | <input type="radio"/>                                       | <input type="radio"/> |
| i. Sports Teams or<br>Clubs       | <input type="radio"/>                          | <input type="radio"/>                                       | <input type="radio"/> |



|  |                       |                       |                       |                       |
|--|-----------------------|-----------------------|-----------------------|-----------------------|
| e. Teachers in this school trust each other.   | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| f. Teachers in this school recognize and respect colleagues who are the most effective teachers. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| g. School leaders visit classrooms to observe the quality of teaching at this school.            | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| h. School leaders give me regular and helpful feedback about my teaching.                        | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| i. School leaders place a high priority on the quality of teaching at this school.               | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| j. Most teachers in my school work together to improve their instructional practice.             | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| k. Teachers in this school use student achievement data to improve instructional decisions.      | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

8. How much do you agree or disagree with the following statements?

|   | Strongly Agree        | Agree                 | Disagree              | Strongly Disagree     |
|---|-----------------------|-----------------------|-----------------------|-----------------------|
| a. This year, coordinated via this school, I received helpful training on the use of student achievement data to improve teaching and learning. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| b. At this school, the professional development I received this year provided me with content support in my subject area(s).                    | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

- |   |                       |                       |                       |                       |
|---|-----------------------|-----------------------|-----------------------|-----------------------|
| c. Via this school, the professional development I received this year provided me with teaching strategies to better meet the needs of my students. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| d. I have sufficient materials to teach my class(es), including: books, audio/visual equipment, maps, and/or calculators.                           | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| e. My instructional materials are in good condition.  | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

9. Based on your experiences during the current school year, how much do you agree or disagree with the following statements?

- |  | Strongly Agree        | Agree                 | Disagree              | Strongly Disagree     |
|--|-----------------------|-----------------------|-----------------------|-----------------------|
| a. Obtaining information from parents about students' learning needs is a priority at my school.   | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| b. Teachers and administrators in my school use information from parents to improve instructional practices and meet students' learning needs. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| c. My school communicates effectively with parents when students misbehave.  | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |



c. sent parents written information on what you are teaching and what students are expected to learn?                                                                                                                   

d. sent home information on services to help students or parents such as: tutoring, after-school programs, or workshops adults can attend to help their children in school?                                                                                                                   

12. How much do you agree or disagree with the following statements?

|   | Strongly Agree        | Agree                 | Disagree              | Strongly Disagree     |
|---|-----------------------|-----------------------|-----------------------|-----------------------|
| a. Order and discipline are maintained at my school.  | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| b. At my school, I can get help needed to address student behavior and discipline problems. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| c. I am safe at my school.  | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| d. Crime and violence are a problem in my school.   | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| e. Students in my school are often threatened or bullied.                                   | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

- |  |                       |                       |                       |                       |
|--|-----------------------|-----------------------|-----------------------|-----------------------|
| f. Adults at my school are often disrespectful to students.  | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| g. Most students at my school treat teachers with respect.   | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| h. Most parents treat teachers at this school with respect.  | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| i. Students' use of alcohol and illegal drugs is a problem at my school.   | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| j. There are conflicts at my school based on race, culture, religion, sexual orientation, gender, or disability. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| k. There is a person or program in my school that helps students resolve conflicts.                              | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| l. Gang activity is a problem in my school.  | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| m. My school is kept clean.  | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

13. With what racial or ethnic group do you identify?

- \_\_\_\_\_ a. White (includes Arabian)
- \_\_\_\_\_ b. Black (includes Carribeans of African but not Hispanic or Arabian descent)
- \_\_\_\_\_ c. Hispanic (includes persons of Central or South America)
- \_\_\_\_\_ d. Asian and Asian American (includes Pakistanis, Indians, and Pacific Islanders)
- \_\_\_\_\_ e. American Indians (Includes Alaskans)

14. Are you a male or female?

- \_\_\_\_\_ a. male
- \_\_\_\_\_ b. female

15. How long have you been a teacher?

\_\_\_\_\_ a. Less than one year

\_\_\_\_\_ b. 1-3 years

\_\_\_\_\_ c. 4-10 years

\_\_\_\_\_ d. 11-15 years

\_\_\_\_\_ e. More than 15 years

16. How do you feel that your school's NCLB status affects you?

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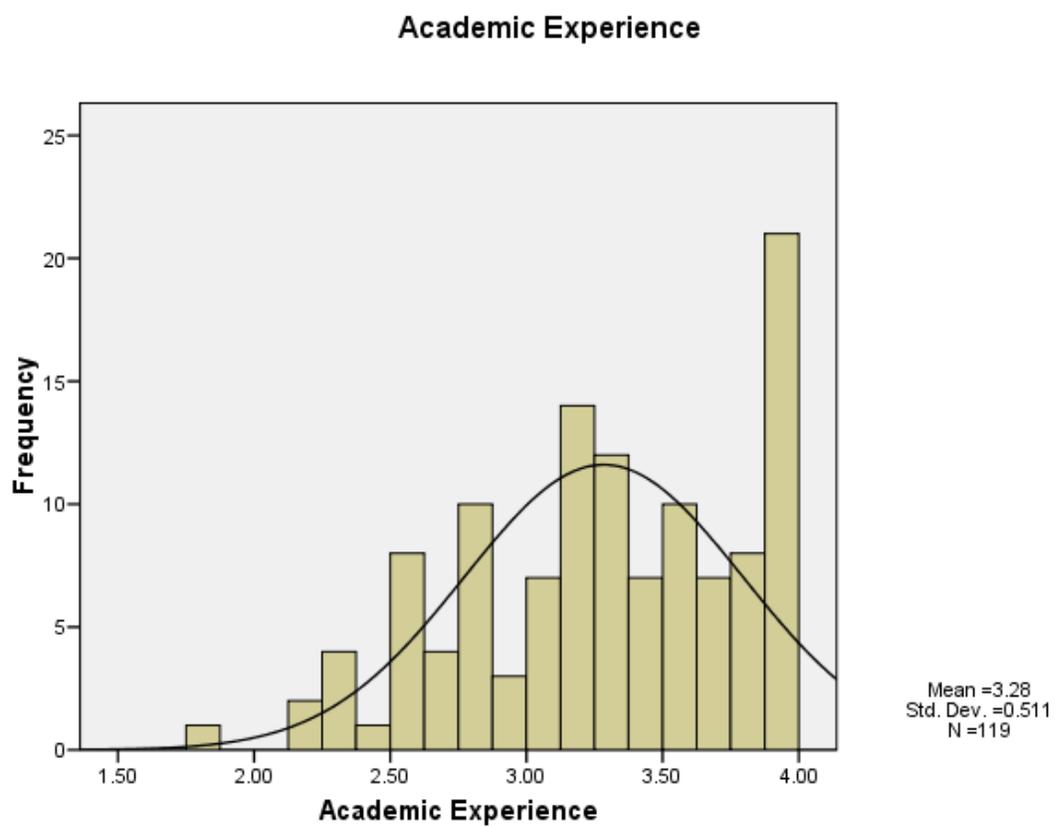
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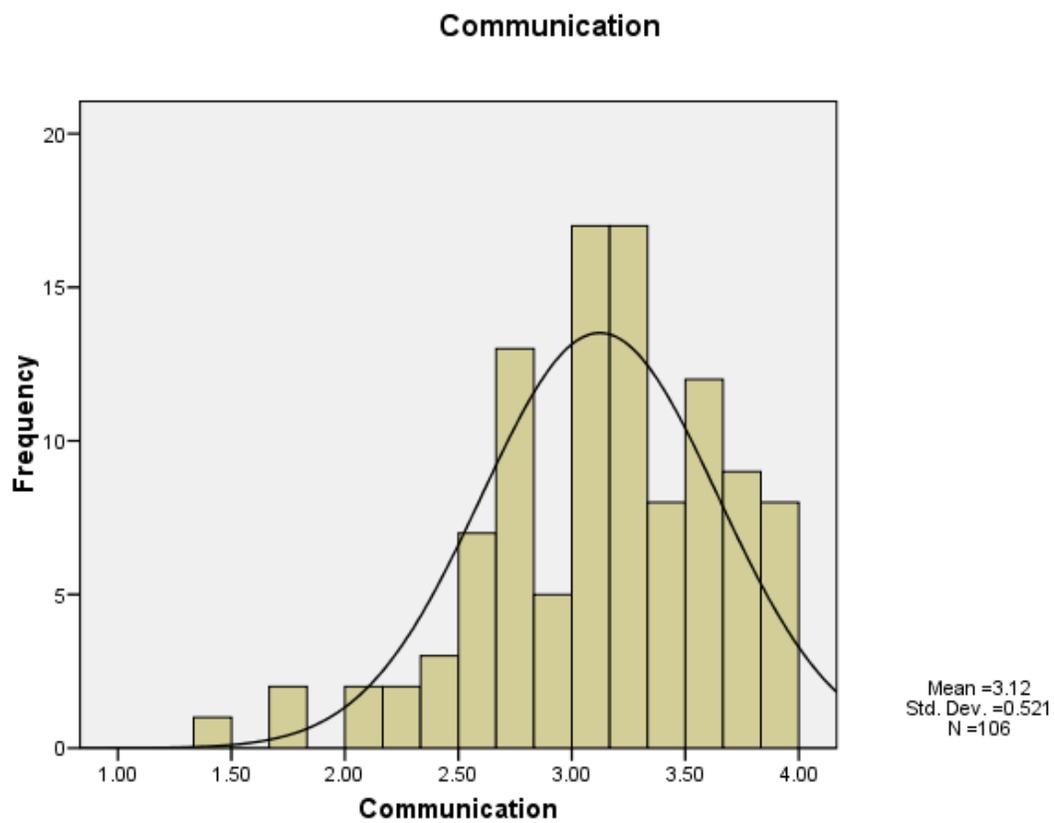
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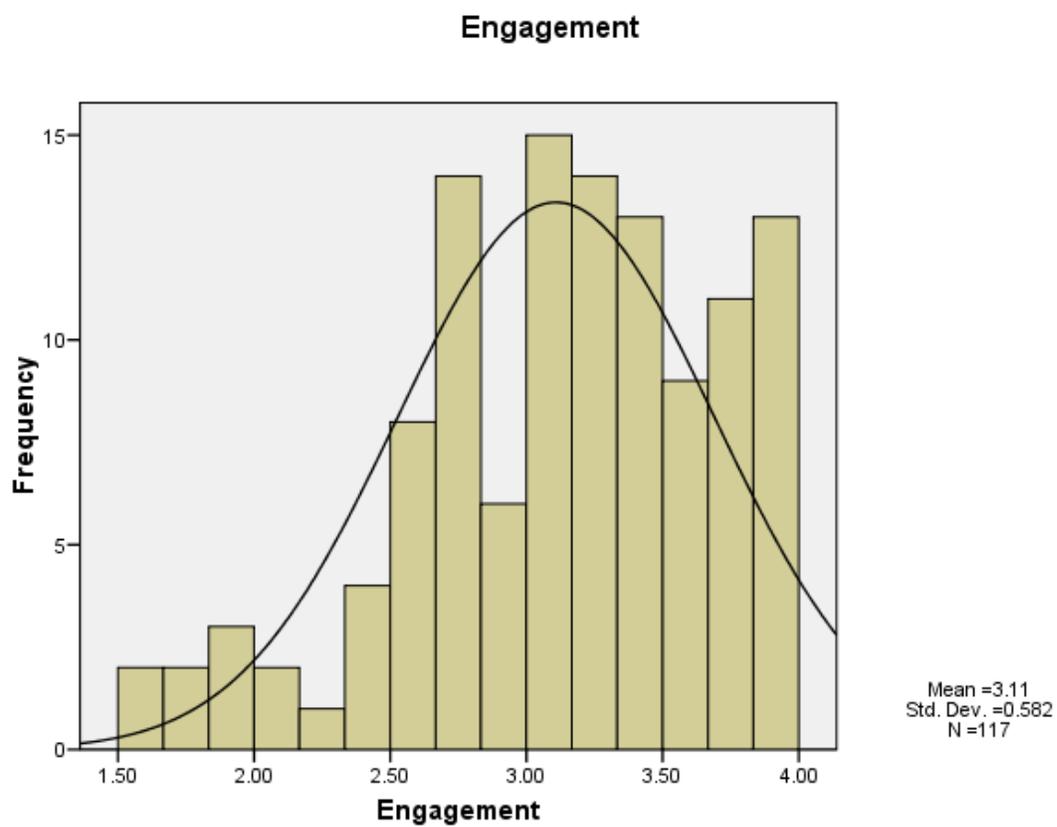
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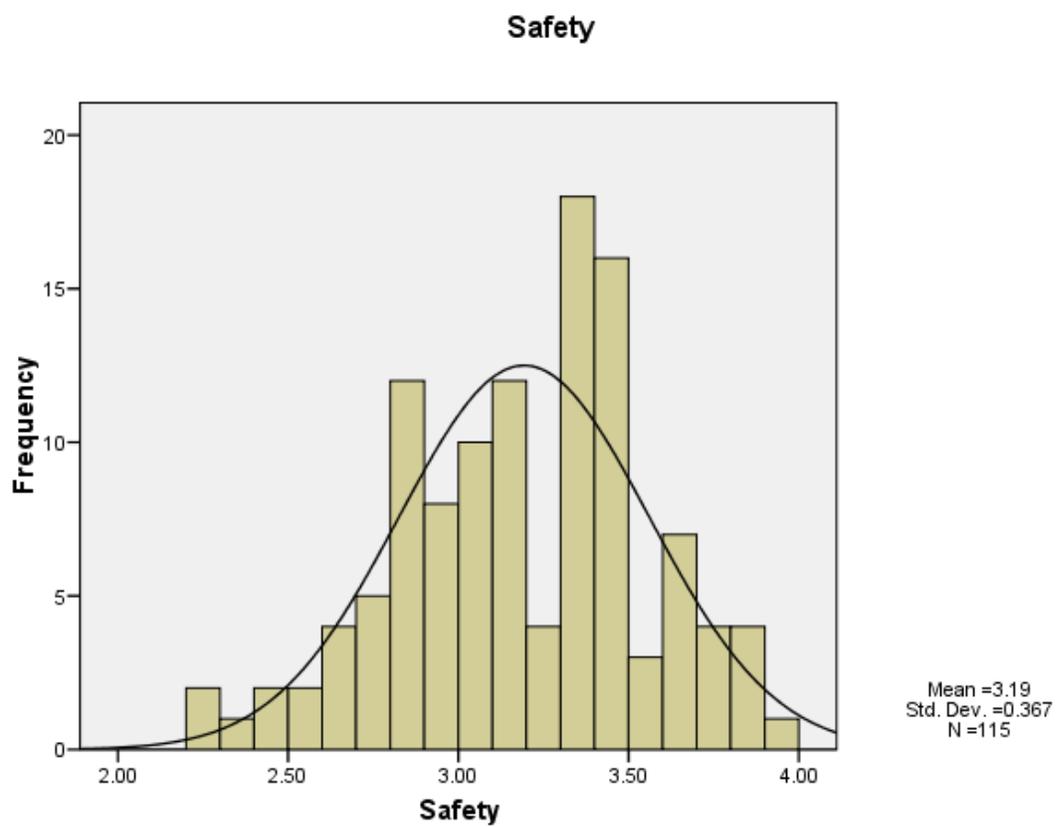
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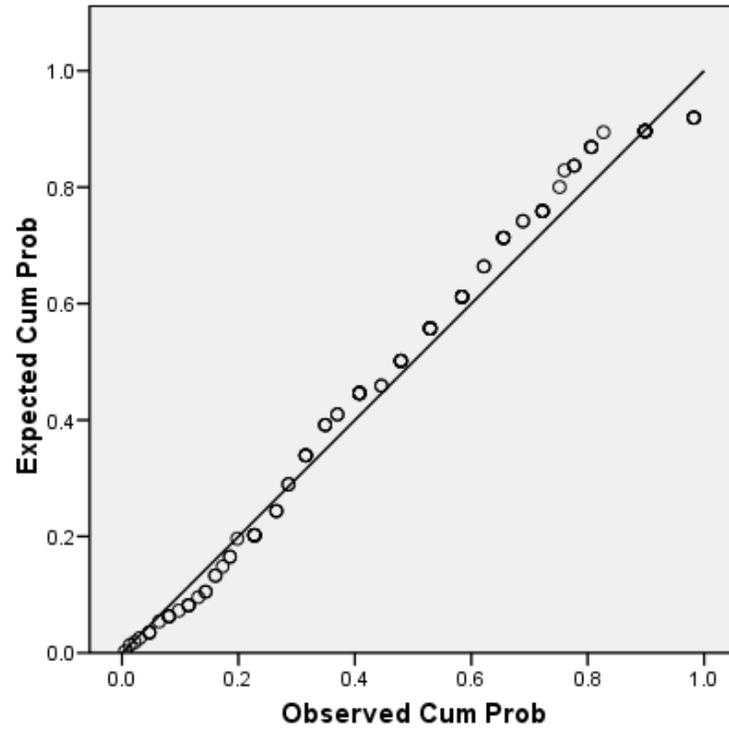
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**Appendix B: Histograms**

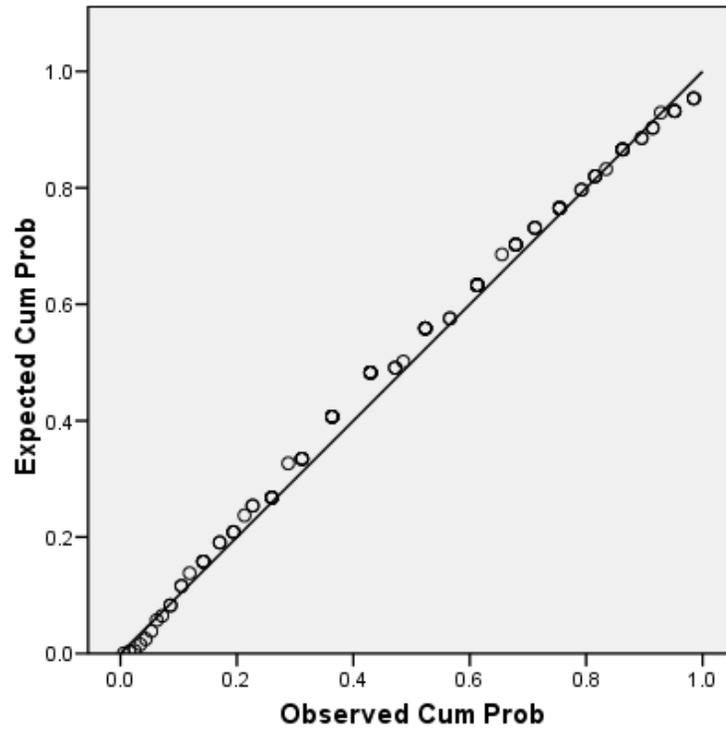




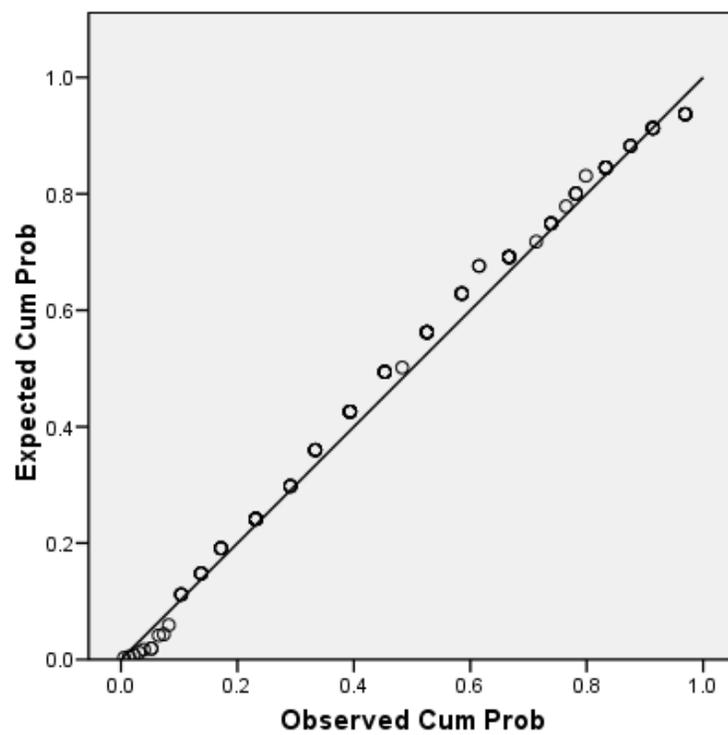


**Appendix C: Normal Probability Plots****Normal P-P Plot of Academic Experience**

Normal P-P Plot of Communication



Normal P-P Plot of Engagement



Normal P-P Plot of Safety

