

PERCEPTIONS OF PRINCIPAL LEADERSHIP, TEACHER LEADERSHIP, STUDENT
DISCIPLINE, AND TEACHER RETENTION BASED ON EVAAS GROWTH AND SCHOOL
PERFORMANCE GRADES IN LOW-PERFORMING ELEMENTARY SCHOOLS IN
NORTH CAROLINA

by

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ABSTRACT

SHAYLA WIGGINS SAVAGE. Perceptions of Principal Leadership, Teacher Leadership, Student Discipline, and Teacher Retention Based on EVAAS Growth and School Performance Grades in Low-Performing Elementary Schools in North Carolina. (Under the direction of DR. JAMIE KUDLATS)

The number of low-performing schools has drastically increased since COVID-19. During the 2018-2019 school year, there were 488 low-performing schools (North Carolina Department of Public Instruction, 2024). The number increased to 736 schools during the 2023-2024 school year, a 50.8% increase (North Carolina Department of Public Instruction, 2024). Understanding factors related to climate in these schools is pertinent to making teachers' jobs more rewarding while improving student outcomes (Rosenburg & Anderson, 2021). Though there is research on school climate and student achievement, more research is needed to examine school climate in low-performing elementary schools in North Carolina.

This quantitative study explored whether two school-level characteristics, namely, schools' Education Value-Added Assessment System (EVAAS) growth status and school performance grade, impact certified staff members' confidence levels regarding principal leadership, teacher leadership, student discipline, and teacher retention. Thus, this quantitative study sought to answer the overarching research question: whether there are statistically significant differences in perceptions of principal leadership, teacher leadership, student discipline, and teacher retention based on their school's EVAAS growth measure and performance grade.

This study's participants were certified staff members from 293 low-performing public elementary schools ranging from pre-kindergarten to fifth grade in North Carolina during the 2021-2022 school year. The statistical analysis used was a 2 x 2 factorial MANOVA, which measured the dependent variables (principal leadership, teacher leadership, student discipline,

and teacher retention). Additionally, the 2 x 2 factorial MANOVA examined the EVAAS growth measure (met or not met) and the school performance grade from each school (D or F) based on the certified staff perspectives of the dependent variables. Findings suggest that teachers' perceptions of teacher leadership and teacher retention differ significantly based on the school's EVAAS growth measure and performance grade in low-performing elementary schools in North Carolina. However, the results did not align with previous research on teachers' perceptions of principal leadership and student discipline, as there was no statistically significant difference.

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CHAPTER 1: INTRODUCTION

Overview

School climate and teachers' working conditions have long been recognized as essential to the success of schools (Rosenberg & Anderson, 2021). However, concerns exist because working conditions and job satisfaction are declining as teachers report increased workloads, inadequate salaries and benefits, increased student mental health concerns, and low morale. Rosenberg and Anderson (2021) found that 84% of educators believe staff morale has decreased since the pandemic, with approximately one-third leaving or retiring early due to the challenges of the pandemic. These data are alarming because teaching is demanding with high attrition rates, particularly in low-performing schools and among beginning teachers (Rosenberg & Anderson, 2021).

School climate and teachers' working conditions are particularly vital in low-performing schools. Schools serving students from economically disadvantaged communities find hiring and retaining teachers more challenging than those serving wealthier communities (Bethel, 2020). Data from the 2015-2016 National Teacher and Principal Survey shows that schools with predominantly low-income students of color experience a teacher attrition rate of 3.4% higher than that of wealthier schools (Garcia & Weiss, 2019). These schools face challenges in retaining teachers and accommodating a growing number of novice and inexperienced educators, who account for over 39.8% of their teaching staff annually due to the teacher shortage (Garcia & Weiss, 2019).

Therefore, high-poverty schools must make teachers' jobs more rewarding and sustainable by ensuring that positive structures and conditions are in place (Rosenburg & Anderson, 2021). These structures include competitive pay, opportunities for advancement,

effective principal leadership, professional learning communities, positive relationships with students, and an intentional focus on improving school climate (Rosenburg & Anderson, 2021). Building these structures in low-performing schools is essential as these schools are often impacted at a greater rate by difficult working conditions.

The number of low-performing schools in North Carolina (schools that received a school performance grade of D or F and a school growth score of “met expected growth” or “not met expected growth”) grew significantly from the 2018-2019 school year to the 2021-2022 school year. According to the North Carolina Department of Public Instruction (2022), there were 488 low-performing schools during the 2018-2019 school year; by the 2021-2022 school year, there were 864 low-performing schools, an increase of 376 schools, which is a 77% increase.

Accompanying this increase in low-performing schools is an increase in teaching vacancies in North Carolina. According to Rash (2023), there were a total of 2,607 vacant certified positions and 3,900 vacant classified positions during the 2020-2021 school year and 3,971 vacant certified positions (an increase of 1,364) and 4,364 vacant classified positions (an increase of 464) during the 2021-2022 school year in North Carolina. In addition to teaching vacancies, there is an increase in residency-licensed teachers, with 1,942 hired in 2020-2021 and 3,618 hired in 2021-2022 (Rash, 2023). Residency-licensed teachers are hired and allowed to begin teaching despite needing to complete their North Carolina teaching licensure requirements (Rash, 2023). This information is essential for low-performing schools as those students are approximately 50% less likely to receive instruction from an experienced teacher (Rash, 2023). Furthermore, Rash identified several important factors related to decreasing the number of low-performing schools: salaries, effective professional development, beginning teacher support and induction, career advancement, and overall environment.

This study investigated the relationship between four school climate factors and low-performing elementary schools in North Carolina. Using data from the North Carolina Teacher Working Conditions Survey (NCTWCS) (2022), four areas related to school climate were examined in low-performing elementary schools in North Carolina: principal leadership, teacher leadership, student discipline, and teacher retention. The NCTWCS is administered to all certified staff every two years to get feedback from educators in the areas of “time, facilities and resources, community support and involvement, managing student conduct, teacher leadership, school leadership, professional learning opportunities, instructional practices and supports, retention, equity, safety, new teacher supports, and pandemic impact” (North Carolina Teacher Working Conditions Survey, 2022). The survey aims to collect input from educators to help foster positive school environments and working conditions essential for the success of both students and teachers (North Carolina Teacher Working Conditions Survey, 2022).

Statement of the Problem

While there is existing research on school climate and its impact on student achievement, further investigation is required to explore school climate, specifically in low-performing elementary schools in North Carolina. Although there is research concerning school climate and its correlation to principal leadership, teacher leadership, student discipline, and teacher retention, there is a need to examine these conditions in low-performing schools. While studies have been conducted comparing the conditions of high-performing and low-performing schools, more studies are needed to compare these conditions within multiple levels of low-performing schools (Ethier, 2017).

Spies-Daley (2004) reviewed the climate in low-performing schools. She examined the relationship between differences in internal conditions (school leadership, school culture, and

school climate) and student achievement within schools ranked below the state average based on Louisiana's accountability system (Spies-Daley, 2004). Based on her research, she recommended additional research in the following areas: examining more closely the perceptions and instructional actions of staff at low-performing schools, examining the relationships between the certification level of teachers, teacher expectations of students, student achievement in low-performing schools, the impact of principal leadership on the academic achievement of low-performing schools, understanding the challenges of ineffective schools, and using multiple domains while examining low-performing schools to determine how to improve school climate (Spies-Daley, 2004).

Recently, Ethier (2017) collected data from 75 teachers at low-performing schools by utilizing the Revised School Level Environment Questionnaire (Revised SLEQ) to assess their perceptions of the overall school climate. According to the study, teachers in higher-achieving schools suggested that their perceptions of the school climate were more favorable than those of teachers in low-performing schools (Ethier, 2017). This study was also aligned with research by Jain et al. (2015), which focused on school climate in relationships between students and teachers, how students learn, procedures and processes, and perceived student well-being and safety. The study's results suggested that teachers in high-performing schools had better perceptions of school climate than teachers in low-performing schools across all four dimensions (Jain et al., 2015). Additionally, Jain et al. found that teachers' perceptions of school climate were lower in low-performing schools that serve inner-city students who are poor and students of color.

Johnson-Spears (2018) "examined the relationship between teacher and student perceptions of school climate and the factors of collaborative teaching, instructional practice,

school leadership, and supportive environment to student achievement in low socioeconomic schools” (p. 49). This followed the work of Eckert (2013), who found that educators and students in low-performing schools face unfair and balanced performance measures, which creates extra stress and pressure on teachers (Eckert, 2013). During their study, Johnson-Spears (2018) examined four spheres of school climate: safety, environmental/structural, teaching and learning, and relationships. They both found indicators that teachers’ views of the school climate are linked to student achievement. For example, collaboration between teachers and their teaching methods is connected. Furthermore, strong principal leadership contributes to a positive environment, and instructional practices and principal leadership are interrelated (Johnson-Spears, 2018).

Researchers have determined that students’ and teachers’ perceptions of school climate, teacher performance, principal leadership, and socioeconomic status are essential to student achievement (Berger & Archer, 2016). Examining these factors related to student achievement will impact student academic outcomes, particularly in low-performing schools (Johnson-Spears, 2018). Doing so requires acknowledging that factors related to school climate have a greater impact on student achievement than individual teachers or principals (Mills et al., 2011). Additionally, teachers’ instruction accounts for 33% of student achievement, and principal leadership is responsible for 25% of student success (Mills et al., 2011). However, the highest impact (42%) on student achievement is not based on principal leadership and teacher instruction but on the school climate conditions (Mills et al., 2011).

Nonetheless, school administrators have a significant impact on the school climate. Waters et al. (2004) state that an effective principal cultivates an environment where staff members have a shared vision and relationships. Perez (2015) added that supportive principals

promote an open, positive school climate. A principal with supportive behavior fosters two-way communication, is seen as helpful, available, and affirming, and knows how to deliver constructive criticism (Perez, 2015). Macneil et al. (2009) suggested that cultures and climates contribute to better-motivated teachers, and the principal is the central leadership source.

However, educators are crucial in creating an inclusive and inviting environment for all students (Bass, 2019). Bass (2019) studied the relationship between teacher leadership and school climate. School climate was measured using the Organizational Climate Index, and the Teacher Leadership Inventory measured teacher leadership. “In this study, school climate focused on four areas: collegial leadership, teacher professionalism, achievement press, and institutional vulnerability” (Bass, 2019, p. 7). The results showed a relationship between three out of the four areas of school climate (Bass, 2019).

According to Gage et al. (2016), positive student behavior support has also been linked to safe schools, which supports the correlation between school climate and behavior. It is noted that gauging and analyzing school climate data is a method for student behavior (Gage et al., 2016). Similarly, Bosworth et al. (2011) determined that clear processes and procedures and meaningful relationships are vital to a school’s climate, which assists with school safety. In a well-organized school with clear rules, adults care for students, and the adults respect each other (Bosworth et al., 2011). When staff and students feel safe, students tend to demonstrate appropriate behavior (Kutsyuruba et al., 2015).

As previously noted, much research exists on factors associated with school climate, and more studies are needed to examine school climate factors in low-performing schools. Therefore, this study analyzed the relationship between four factors related to school climate in low-performing schools in North Carolina and student achievement. It's important to highlight that

many schools identified as low-performing in North Carolina are high-poverty and predominantly serve students of color (Hui, 2015). According to Giles (2018), there were higher retention rates at low-performing elementary schools in North Carolina.

This topic has practical importance because the number of low-performing schools continues to increase in North Carolina. During the 2021-2022 school year, 110 out of 115 districts had at least one school identified as low-performing (Walkenhorst et al., 2022). Additionally, one in three schools was on the low-performing list in 2021-2022, with 864 schools designated low-performing compared to 488 schools during the 2018-2019 school year (Walkenhorst et al., 2022). The topic also expands empirical knowledge about climate factors in low-performing schools that may contribute to increased teacher retention and improved academic achievement. Therefore, this study seeks to determine if a relationship exists between multiple levels of low-performing schools (D or F/met or not met) and school climate.

Purpose Statement

This study explored whether two school-level characteristics, namely, schools' Education Value-Added Assessment System (EVAAS) growth status and school performance grade, impact certified staff members' confidence levels regarding principal leadership, teacher leadership, student discipline, and teacher retention. Thus, this quantitative study aimed to answer the overarching research question: whether there are statistically significant differences in perceptions of principal leadership, teacher leadership, student discipline, and teacher retention based on their schools' EVAAS growth measure and performance grade.

Research Questions

The following research questions guided this quantitative study:

1. Are certified staff members' perceptions of principal leadership significantly different according to the EVAAS growth status and school performance grade in low-performing elementary schools in North Carolina?
2. Are certified staff members' perceptions of teacher leadership significantly different according to the EVAAS growth status and school performance grade in low-performing elementary schools in North Carolina?
3. Are certified staff members' perceptions of their students' discipline significantly different according to the EVAAS growth status and school performance grade in low-performing elementary schools in North Carolina?
4. Are certified staff members' perceptions of teacher retention significantly different according to the EVAAS growth status and school performance grade in low-performing elementary schools in North Carolina?

Theoretical Framework

Hoy and Feldman's (1987) concept of organizational health is the theoretical framework used in this dissertation. Organizational health is "a mixture of organizational theories from education and sociology" (Etzioni, 1975; Miles, 1969; Parsons et al., 1953; Roney et al., 2007. p. 292). According to work by sociologists Parsons et al. (1953), every social system faces four key challenges: adapting to external demands, achieving set goals, integrating and maintaining its functioning, and maintaining the climate. For schools to function effectively, Parsons (1958) suggests that schools must have three levels of control. The technical level focuses on the effectiveness of the academic program, the managerial level is the cultural and climate aspect of the school, and the managerial level is principal leadership (Roney et al., 2007). These three levels connect the school to the environment, which is "the degree to which the school can cope

with the environment in a way that maintains the educational integrity of its programs” (Hoy & Hannum, 1997, p. 294). According to Parsons (1958), schools must have these three levels of control to function properly. A healthy school is created when these three levels work together in unison (Roney et al., 2007).

In the late 1950s, social scientists started examining work environment variations, leading to the term "organizational climate" (Hoy & Tarter, 1997). “Climate is a general concept that captures an enduring quality of organizational life” (Hoy & Sabo, 1998, p. 337). The comparison suggests that an individual's personality significantly influences their behavior, much like how the organizational climate impacts its overall functioning (Hoy & Tarter, 1997). The organizational climate represents a factor of the entire organization, which should be described instead of evaluated (Hoy & Sabo, 1998). The organizational climate is derived from all the staff and students' perceptions and is formed based on processes and procedures (Hoy & Tarter, 1997).

Research indicates that organizational climate consists of unique factors that distinguish an organization from another and affect the behavior of its members (Hoy & Tarter, 1997). Like organizational climate, school climate is also experienced by all members derived from shared perceptions of processes and procedures enacted at the school Hoy and Miskel (1996). Thus, the school climate is organizational culture, the “system of shared orientations that hold the unit together and give it a distinctive identity” (Hoy & Miskel, 2013, p. 180). All members experience school climate, affecting their behavior influenced by shared perceptions (Roney et al., 2007). Hoy and Hannum (1997) suggested that healthy schools “successfully adapt to their environments, achieve their goals, and infuse common values and solidarity into the teacher

work group” (p. 293). According to previous research, schools with positive and healthy climates are associated with increased student success (Roney et al., 2007).

According to Miles (1969), the term “organizational health” is also associated with school climate, and it sustains operations, overcomes challenges, and has an outlook for the future. The term “organizational health,” as defined by Parsons et al. (1953), Hoy and Tarter (1997), and Hoy and Miskel (1991), is the capacity to adjust an organization to its surroundings, create meaningful relationships, and successfully achieve goals. Therefore, the organizational health of a school is an indicator of the sense of community and relationships that have been formed. “Organizational health” became more essential in practice and research after the 1980s. Before introducing the term organizational health, it was perceived that issues in the educational system stemmed from external concerns that the school did not control (Hoy et al., 1996). Based on research, the organizational climate is based on relationships mainly formed within the school rather than outside the school community (Hoy et al., 1996). Without a theoretical guide, it is difficult to determine whether one school has a better climate or culture than another; however, the effectiveness of organizational climate is best defined within a conceptual context (Hoy & Ferguson, 1985).

Overview of Research Design

Federal regulations require low-performing schools to submit plans for transformation, and leaders of these schools must overcome barriers while developing a positive school climate that supports academic success (McCarley et al., 2014). Based on North Carolina General Statute 115C-83.15 (2019), “low-performing schools are defined as schools that received a school performance grade of D or F and a school growth score of met expected growth or not met expected growth.” According to the North Carolina Department of Public Instruction, at the end

of the 2021-2022 school year, 294 elementary schools ranging in grades from pre-kindergarten to fifth were identified as low-performing (Maher & Howard, 2022).

I conducted a 2 x 2 factorial multivariate analysis of variance (MANOVA) research design. The independent variables were the EVAAS growth measure and the school performance grade. The dependent variables were principal leadership, teacher leadership, student discipline, and teacher retention. The low-performing schools were identified by two factors: EVAAS growth status (met growth or not met growth) and school performance grade (D or F). Data from statements from the NCTWCS were analyzed at each school level. Some examples of the statements include: “the school leadership consistently supports teachers” (principal leadership), “teachers are recognized as educational experts” (teacher leadership), “students at this school follow rules of conduct” (student discipline), and “overall, my school is a good place to work and learn” (teacher retention).

The general purpose of a MANOVA design is to determine whether levels of independent variables on their own or in combination with one another have an effect on the dependent variables (Multivariate Analysis of Variance, 2005). The MANOVA method is appropriate as the four dependent variables are all factors from the NCTWCS and are closely related. I gathered data for this study on a spreadsheet under the following headings: grade span, school performance grade, EVAAS growth status, total response percentage, individual statements on principal leadership, teacher leadership, student discipline, and teacher retention. This approach benefited this study because data were reviewed by analyzing multiple variables at multiple levels of low-performing elementary schools.

Research Site, Participants, Data Collection

Data for this study were collected from the 2022 NCTWCS results and the 2021-22 Low-Performing Schools List data set available on the North Carolina Department of Public Instruction website. Data from 293 low-performing elementary schools from pre-kindergarten to fifth grade were examined. My target population was certified staff, including teachers, school administrators, counselors, nurses, social workers, and speech pathologists employed at each low-performing elementary school during the 2021-2022 school year. Of the 294 low-performing schools in North Carolina, 293 schools met the criteria. One school had an NCTWCS participation rate of 32%. To yield data from the NCTWCS, the school must have a survey response rate of a minimum of five staff members and a completion rate of 40%.

The schools are from 74 school districts in North Carolina. The state is divided into eight regions. Of the school districts represented, 13 schools are from the northeast district, eight are from the southeast district, 12 are from the north central district, eight are from the sandhills district, 12 are from the piedmont-triad region, 11 are from the southwest district, nine from the northwest district and five schools are from the western district. Of the 294 schools, 283 are Title I schools. Founded in 1965, Title I began as a part of the Elementary and Secondary Education Act and is the most extensive federal educational program in the country that provides funds to high-poverty schools in which a significant percentage of students receive government benefits (Onslow County Schools, 2022).

Significance of the Study

Examining school climate in low-performing elementary schools in North Carolina is essential for retaining teachers, increasing academic achievement, developing principal and teacher leadership, and improving student behavior. Additionally, the examined variables are all

factors that significantly impact low-performing schools, and previous research has shown that the school environment is correlated to teachers' working conditions (Aubry, 2010; Bethel, 2020; Davis & Warner, 2015). This study will contribute by adding research about school climate in low-performing elementary schools. It is significant for principals and school districts as 110 out of 115 school districts in North Carolina have at least one low-performing school.

Limitations

This study has several limitations. First, only 293 low-performing elementary schools in North Carolina will be examined. Specifically, this research will focus on low-performing elementary schools serving pre-kindergarten to fifth-grade students, a total of 293 schools spanning 74 districts. While there are low-performing elementary schools that serve a series of grade bands, such as students in grades kindergarten to five, they will not be examined. Additionally, the low-performing elementary schools must have an NCTWCS of at least five participants with a minimum response rate of 40%. Though 212 of the 294 schools had a 100% response rate to the NCTWCS, 82 schools did not have a 100% response rate, with one school having a response rate of 32%. Therefore, not all the certified staff members at those 82 schools will be represented in the results, and only one school was not included in this study.

Assumptions

This study makes several assumptions. First, all certified staff members at each low-performing school were given an individual code to complete the NCTWCS. Additionally, the survey should have been answered accurately to reflect their opinions, completed individually, and not under the influence of school leadership. By answering honestly, I would receive the most accurate and timely data possible. The third assumption is that the 293 schools yielded sufficiently rich data and information.

Definition of Terms

academic achievement. Academic achievement represents students who met or exceeded growth based on the Education Value-Added Assessment System (EVAAS) and scored a level three, four, or five on the North Carolina End-of-Grade assessments.

education value-added assessment system (EVAAS). EVAAS is a program that was developed to measure the growth of students. It examines the impact of teachers, schools, and districts on students' learning in specific courses, grades, and subjects. Based on the growth, students, schools, and districts are classified as exceeding growth, meeting growth, or not meeting growth (SAS Institute, 2018).

low-performing schools. Low-performing schools are identified on an annual basis, and they are defined as schools that earn an overall school performance grade of a D or F and an EVAAS growth status of “met expected growth” or “not met expected growth” (Identification of Low Performing Schools, 1997).

North Carolina Teacher Working Conditions Survey. The North Carolina Teacher Working Conditions Survey is a biennial survey administered to all certified school employees working in public schools in the state. It measures the following: time, facilities and resources, community support and involvement, managing student conduct, teacher leadership, school leadership, professional learning opportunities, instructional practices and supports, teacher retention, equity, safety, new teacher supports, and pandemic impact (North Carolina Teacher Working Conditions Survey, 2022).

principal leadership. “Principal leadership is the principal's effort to influence, encourage, guide, and direct teachers, staff, students, parents, and other related individuals to work together in achieving set goals” (Pardosi & Utari, 2021, p. 3).

school climate. “School climate is defined as the feel of a school” (Halpin & Croft, 1963, p. 1).

student discipline. Student discipline is the strategies and support systems that guide children in learning to develop safe, socially responsible behavior that promotes self-respect and respect for the feelings and property of others (Procedural Directives — Albuquerque Public Schools, 2022).

school performance grade. School performance grades are based on 80% of a school’s achievement score on state-mandated end-of-year tests and 20% academic growth on these measures. The total school performance score is converted to a 100-point scale, and the final grades are based on a 15-point scale: A: 85-100, B: 70-84, C: 55-69, D: 40-54, F: 39 and below. Performance grades for elementary schools are calculated based on end-of-grade test scores and English language assessments for English learners (Moore, 2022).

teacher leadership. “The term teacher leadership refers to that set of skills demonstrated by teachers who continue to teach students but also have an influence that extends beyond their own classrooms to others within their own school and elsewhere” (Danielson, 2006, p.12).

teacher retention. “Teacher retention is when a teacher remains teaching in the same school from one year to the next” (Giles, 2018, p. 10).

Organization of the Study

There are multiple facets to measure when determining the factors of school climate. In addition to principal leadership, teacher leadership, student discipline, and teacher retention, the NCTWCS also measures “time, facilities and resources, community support and involvement, professional learning opportunities, instructional practices and supports, equity, safety, and new

teacher supports” (North Carolina Teacher Working Conditions Survey, 2022). This study sought to determine if there is a relationship between multiple levels of low-performing schools and four specific factors affecting school climate: principal leadership, teacher leadership, student discipline, and teacher retention. These four variables were chosen to measure school climate because the literature supports their impact (Perez, 2015; Aubry, 2010; Spies-Daley, 2004; Bass, 2019). Additionally, while these do not encompass all factors impacting climate, I am keenly interested in these four factors because I have always found them pivotal during my lengthy tenure as a principal. Researchers have found linear relationships between principal leadership and teacher leadership, principal leadership and teacher retention, teacher leadership and student discipline, teacher leadership and teacher retention, and student discipline and teacher retention (Ethier, 2017; Jain et al., 2015; Berger & Archer, 2016; Bethel, 2020).

Research provides insight into how these four variables impact student achievement and school climate, as cited in the literature below. Providing insight into these areas for low-performing elementary schools could improve student outcomes. According to Viano et al. (2021), teachers in low-performing schools strongly prefer two effective school processes: administrative support and discipline enforcement. Furthermore, several studies show that teachers leave low-performing schools at much higher rates than other schools, which yields overall adverse effects on student achievement (Guarino et al., 2006; Hanushek et al., 2004; Hughes, 2012; Redding & Henry, 2018; Viano et al., 2021).

The rest of the study will be organized into four subsequent chapters. Chapter 2 reviews scholarly literature regarding the history of school climate, school climate and academic achievement, school climate and principal leadership, school climate and teacher leadership, school climate and student discipline, and student climate and teacher retention. Chapter 3

outlines the research design and methods used in the study, including the methodology, participants, data collection process, research questions, research design, positionality statement, instrumentation, and limitations. The analysis and the results of the data are presented in Chapter 4. Chapter 5 summarizes the research, discusses key findings, outlines contributions to the academic field, explores implications for professional practice, and offers recommendations for future research. The chapter concludes with a bibliography of cited sources and appendices.

CHAPTER 2: LITERATURE REVIEW

Introduction

This study examined how the EVAAS growth measure and school performance grade impact teachers' perceptions of school climate in principal leadership, teacher leadership, student discipline, and teacher retention in low-performing elementary schools in North Carolina. This section reviewed professional literature on the history of school climate and how it is examined. Additionally, I described the literature on school climate and its correlation to academic achievement, principal leadership, teacher leadership, student discipline, and teacher retention. The review of literature encompasses information from textbooks, professional journals, research studies, and dissertations. Table 1 outlines the themes identified in the literature review and the reviewed sources.

Table 1

Identified Themes in the Literature

Theme	Sources
School Climate Defined	Anderson, 1982; Black, 2010; Booren et al., 2011; Cohen, 2006; Cohen et al., 2009; Davis & Warner, 2015; Eller & Eller, 2009; Halpin & Croft, 1963; Hoy et al., 1991; Hoy et al., 1998; Hoy et al., 2002; Hoy & Sabo, 1998; Hoy & Tarter, 1997; Lunenburg, 2011; Kutsyruba et al., 2015; Loukas, 2007; Lunenburg & Ornstein, 2022; MacNeil et al. 2009; Miles, 1969; National School Climate Council, 2007; Schein & Schein, 2016; Thapa et al., 2013; Tarter et al., 1989
School Climate and Academic Achievement	Brookover et al., 1978; Bulris, 2009; Davis & Warner, 2015; Demaray et al., 2012; Dulay & Karadağ, 2017; Eller & Eller, 2009; Freiberg,

Table 1*Identified Themes in the Literature (continued)*

	1998; Goddard et al., 2000; Heck, 2000; Hoyle et al., 1985; Hoy et al., 1990; Koçyiğit, 2017; Kutsyuruba et al., 2015; Loukas, 2007; MacNeil et al., 2009; Tschannen-Moran & Barr (2004); Urban, 1999; Watson, 2001; Zullig et al., 2010
School Climate and Principal Leadership	Bullach et al., 1998; Bulach & Malone, 1994; Crowther et al., 2008; Deal & Peterson, 2016; Drago-Severson, 2012; Dutta & Sahney, 2021; Eller & Eller, 2009; Forsyth, 2008; Gülşen & Gülenay, 2014; Hansen, 1991; Heck & Hallinger, 2014; Hoy & Miskel, 2005; Kelley et al. 2006; Kutsyuruba et al., 2010; Kutsyuruba et al., 2015; Murtedjo & Suharningsih, 2018; Palmer, 2016; Saleh & Khine, 2014; Smith et al., 2005; Smith et al., 2020; Tschannen-Moran & Gareis, 2015; Walker et al., 2011; Waters et al., 2004
School Climate and Teacher Leadership	Alliance for the Study of School Climate, 2011; Danielson, 2006; Danişman, 2017; Drago-Severson, 2012; Eller & Eller, 2009; Heck & Hallinger, 2014; Hoy et al., 2002; Jussim, 1986; Kutsyuruba et al., 2015; Lee et al., 1999; Leithwood, 1992; Leithwood & Sun, 2018; Shochet & Smith, 2012; Smith et al., 2020; Stronge, 2010
School Climate and Student Discipline	Alessandri et al., 2012; Arbuckle & Little, 2004; Azevedo et al., 2021; Caridade et al., 2020; Centers for Disease Control and Prevention (CDC), 2009; Cohen et al., 2009; Demaray et al., 2012; Dorio et al., 2019; Gage et al., 2016; Greene, 2005; Gregory et al., 2010; Irvin et al., 2004; Jimerson et al., 2006; Jimerson et al., 2012; Johnson, 2009; Kuperminc et al., 2001; Kutsyuruba et al., 2015; Leithwood & Sun, 2018;

Table 1*Identified Themes in the Literature (continued)*

	Little & Akin-Little, 2008; Loukas, 2007; Ma, 2003; Ma & Klinger, 2000; Ma & Williams, 2004; Mitchell & Bradshaw, 2013; NSCC, 2012; Nunes et al., 2017; O'Brennan et al., 2014; Orozco-Solis et al., 2016; Procedural Directives — Albuquerque Public Schools, 2022; Reaves et al., 2018; Steffgen et al., 2013; Thapa et al., 2013; Vagi et al., 2018; Van Eck et al., 2017; Wang, 2009; Wang & Degol, 2016; Wang et al., 2010; Way et al., 2007
School Climate and Teacher Retention	Barmby, 2006; Boe et al., 2008; Brown & Wynn, 2009; Buchanan, 2010; Coley, 2009; Dahlkamp et al., 2018; Devos & Bouckenooghe, 2009; Douglas, 2010; Elfers et al., 2006; Guarino et al., 2006; Harper, 2009; Ingersool, 2002; Joiner, 2009; Keigher & Cross, 2010; Kukla-Acevedo, 2009; Lankford et al., 2002; Ndoye et al. 2010; Perrachione et al., 2008; Russell, 2005, Smethem, 2007; Thornton et al., 2008; Tschannen-Moran & Gareis, 2004; Waddell, 2010;

School Climate Defined

The term school climate has multiple meanings and is often regarded as being like school culture (Lunenburg & Ornstein, 2022). Schein and Schein (2016) described school climate as culture, the beliefs and behaviors that characterize an organization. These include the shared philosophies, attitudes, norms, and behaviors that guide operations (Schein & Schein, 2016). Similarly, school climate is commonly considered the total environmental quality in a school building or district. Positive school climates are often described using terms such as open, warm, and bustling (Schein & Schein, 2016). By contrast, adverse school climates are commonly described as cold, impersonal, rigid, and closed (Schein & Schein, 2016). Halpin and Croft

(1963) state that “school climate is defined as the feel of the school” (p. 1). According to Eller and Eller (2009), it is essential to think about how the school feels or the personality of the environment, as this is an accurate indication of the climate.

School climate is described as the emotions and attitudes that characterize the school's environment (Loukas, 2007). Miles (1969) was the first to define a healthy organization as an entity that “not only survives in its environment but continues to cope adequately over the long haul and continuously develops and expands its coping abilities” (p. 378). The term school climate was initially introduced by Halpin & Croft (1963) as organizational climate.

Organizational climate was defined as the “personality” of a school in the figurative sense that the “personality” is to the individual as “climate” is to the organization. The openness of the organizational climate can be measured by the relationships between staff, principals, and students (Kutsyuruba et al., 2015).

Various versions of the Organizational Climate Description Questionnaire (OCDQ) were created to describe the school climate (Halpin & Croft, 1963; Hoy & Tarter, 1997). Halpin & Croft (1963) conducted the OCDQ for 71 elementary schools to determine the climate. The survey measured teachers’ behaviors and principals’ behaviors. Based on the results, the principal’s ability determines the school’s effectiveness or lack thereof (Halpin & Croft, 1963). Based on the behaviors from the OCDQ, Halpin and Croft (1963) developed six profiles of school climate. The open climate is positive and moving towards its goals, and the autonomous climate is when leadership acts come from the staff. Whereas the controlled climate is not personal and often based on tasks, the familiar climate is personal but highly supervised. The paternal climate is described as a situation in which the leader restricts the group's leadership actions and tries to make most decisions independently; in contrast, the closed climate is marked

by a high level of indifference, causing the organization to remain stagnant (Halpin & Croft, 1963).

Researchers have used openness and health to analyze school environments (Hoy & Sabo, 1998; Hoy et al., 1991; Tarter et al., 1989). While there are differences in their research, there is substantial common ground in the research designs and measures being used.

Recognizing that open schools are considered to be healthy, Hoy et al. (2002) developed a perspective that captures this concept. The OCDQ and the organizational health inventory were consolidated to evaluate the relationship into four dimensions to measure openness and health within the organization (Kutsyuruba et al., 2015). The survey also accessed three areas and evaluated the relationship between the school and students (Kutsyuruba et al., 2015).

Anderson (1982) also researched school climate. Anderson analyzed over 200 references regarding school climate to organize research and draw common conclusions. Through her research, she concluded that (a) schools possess climate that is unique to each building, (b) these differences are difficult to describe and measure, (c) student body interaction or classroom procedures influence climate, (d) climate affects academic achievement, and (e) understanding how climate influences student behavior will provide a better understanding of student behavior. Anderson (1982) also described three perspectives on which researchers view school climate research, which included the following:

- The Albatross: Research on school climate is considered burdensome for policymakers who require information on methods that can be easily controlled to influence student outcomes,

- The Unicorn: School climate research is seen as a desirable focus, but it cannot be attained, which is described as the unicorn theory, an animal that will never be found, and
- The Phoenix: School climate research is both possible and desirable; though studying school climate is difficult, there is a holistic focus that can be measured.

A strategy Eller and Eller (2009) provided to gauge school climate was administering the Organizational Health Inventory (OHI). When examining school climate through the OHI, Hoy and Tarter (1997) used the metaphor of healthy and sick schools. They described a healthy school as one with harmony between students and the staff, with a focus on instructional success (Hoy & Tarter, 1997). Teachers like their jobs, believe in their students, set reasonable goals, and the climate is structured yet welcoming. Principals are supportive, provide teachers with necessary resources, and provide collegial leadership (Hoy & Tarter, 1997). Importantly, principals in healthy schools protect their teachers from unreasonable outside forces. By contrast, a sick school has little structure, minimal encouragement for teachers facing destructive external influences, and lacks an effective principal (Hoy & Tarter, 1997). There is little trust among teachers, inadequate resources, and inconsistent focus on quality instruction (Lunenburg & Ornstein, 2022).

More recently, the National Association of Secondary School Principals (NASSP) developed a task force to investigate school climate (Lunenburg, 2011). They found that school climate was defined as ambiguous, and most climate studies relied on teacher feedback (Lunenburg, 2011). As a result, NASSP developed a school climate survey to seek the perceptions of all major stakeholders (Lunenburg, 2011). The survey collected and measured data about multiple school climate factors, including relationships, safety and well-being,

principal leadership, student academics, student behavior, school and community relationships, and instructional processes (Lunenburg, 2011). It was determined that school climate is measured by multiple characteristics, including the social environment, the school district and community environments, and school and classroom environments (Lunenburg, 2011). Furthermore, it was determined that a positive school environment creates an ideal environment for student achievement (Lunenburg, 2011). By assessing the climate, opportunities can be provided to determine and address issues that impede students' learning. (Lunenburg, 2011).

Cohen et al. (2009), explained that the collective experiences of individuals within the environment shape the concept of school climate. Hoy et al. (2002) emphasized fostering positive relationships among students, teachers, and principals as a key element of a healthy school environment. In this type of school, teachers positively regard their colleagues, the school environment, and their job. Teachers in a healthy climate believe in their students and their academic ability (Kutsyruba et al., 2015). Additionally, students work hard, principals have high expectations, and they help teachers in a supportive manner (Kutsyruba et al., 2015).

Loukas (2007) suggested that a school's climate is not experienced the same way by all staff; instead, each staff member has a different perception of the school climate. Consequently, individuals working in the same building may have varying perceptions of school climate because of differences in professional experiences, viewpoints, or roles (Booren et al., 2011). For example, some staff members may have a positive outlook, whereas others may have a negative or pessimistic view (Kutsyruba et al., 2015). Not only does the school climate influence the daily experiences of individuals, but it also impacts students' learning experiences (Black, 2010; Cohen, 2006). Though studies reveal various connotations about school climate, it is clear that it

can foster an environment for student achievement, providing direction for the low-performing elementary schools being examined in this study.

School Climate and Academic Achievement

School climate has been the subject of considerable research over the years. However, in the 1950s, the scientific study of school climate began with the concept of organizational climate (Zullig et al., 2010). During the late 1970s, researchers began associating climate with student academic achievement (Brookover et al., 1978). Many published articles investigated the link between school climate and students' academic progress. For example, “school climate is measured in four areas: (a) safety and respect, (b) teaching and learning, (c) relationships, and (d) environment” (Davis & Warner, 2015, p. 959).

In the Davis and Warner (2015) study, school progress report academic data from 263 high schools were used as a dependent variable, and survey data were used to determine a school climate score for each building. The student academic progress composite variable consisted of credit accumulation, the average completion rate for the regents’ exam, and the weighted regents’ pass rate (Davis & Warner, 2015). The school climate composite consisted of student achievement, relationships, student safety and well-being, and respect. The Davis and Warner study had three significant findings. First, a school’s climate is significantly related to a student’s academic progress. Second, the school climate factors of student safety and well-being, relationships, and academic expectations can help determine student success. Third, the school climate conditions contribute more to student growth than student background characteristics. The researchers also noted that improvements in school climate could be created by cultivating institutional expectations, developing strong relationships between the school and community, engaging students and families instructionally and socially, and promoting a safe and friendly

school environment (Davis & Warner, 2015). It was also noted that improvements must go beyond teaching to the test. Discovering how all stakeholders work together to create positive climates in schools is essential because all these things impact instruction, classroom expectations, and how students relate to the adults and other students in the building (Davis & Warner, 2015).

Other researchers agreed that a positive school climate with high expectations is crucial to student achievement (Eller & Eller, 2009). Using the criterion-referenced Texas Assessment of Academic Skills (TAAS) that measures students' academic skill levels in reading, math, and writing, MacNeil et al. (2009) examined how Texas' schools rated as "exemplary, recognized, and acceptable" had different perspectives of school climate, which was determined by the OHI survey. To provide context, in exemplary schools, at least 90% of the students passed the TAAS, and student dropouts were less than 1%; in recognized schools, at least 80-89% of the students passed the TAAS, and less than 3% of students dropped out; and in acceptable schools, 50-79% of the students passed the TAAS, and the dropout rate was less than 5.5% (MacNeil et al., 2009). The OHI was given to teachers to gauge the school climate. The results of this study indicated the following: (a) students in schools with positive climates scored higher on standardized tests, (b) schools exhibiting greater student achievement tended to have healthier climates, and (c) students' learning improved when effective leadership was displayed by principals (MacNeil et al., 2009).

One of the most important actions the principal can initiate to build structures is to communicate a strong vision for the school (MacNeil et al., 2009). The school climate improves when the principal sets clear goals that students and staff support (MacNeil et al., 2009). Furthermore, the climate will improve when the principal develops systems and processes to

withstand stress and maintain stability while managing the school's demands (MacNeil et al., 2009). Koçyiğit (2017) suggests that school climate significantly influences performance, outcomes, and student success. As a result, Koçyiğit (2017), examined a pool of 303 studies with the words school culture and student achievement/success in the titles, of which 51 met the criteria of the study. The study, which included 66,391 participants, identified a positive relationship between climate and academic success (Koçyiğit, 2017). Similarly, Bulris (2009) examined 30 studies consisting of 3,378 schools, which also reviewed the effect of climate on academic success. The study identified a significant correlation between school climate and achievement and highlighted that school climate plays a vital role in principal leadership and academic success (Bulris, 2009).

A positive school climate impacts teaching and learning (Dulay & Karadağ, 2017). Additionally, a positive school climate is a setting where students are safe and valued, which impacts academic achievement (Dulay & Karadağ, 2017). According to Tschannen-Moran and Barr (2004), a safe school environment where students have positive relationships, are valued, and are engaged in learning affects student achievement. It was also noted that school climate predicts outcomes such as student achievement (Dulay & Karadağ, 2017). In other words, school climate is key to enhancing academic achievement (Dulay & Karadağ, 2017). Students go to school to learn academically and how to become productive adults in society. However, it is also important that students gain the proper social-emotional skills to support learning in a supportive environment (Kutsyuruba et al., 2015).

School climate is essential to a successful instructional program (Kutsyuruba et al., 2015). Hoyle et al. (1985) state that academic success is challenging without a positive climate. A positive school climate boosts morale, enhances teaching and learning, and improves staff

performance, while a negative climate can greatly impede student success (Freiberg, 1998; Goddard et al., 2000; Heck, 2000). Urban (1999) explained that students must experience a positive climate; if not, they may not realize their full potential. A study by Hoy et al. (1990) observed that continuous improvement in student achievement was associated with schools that prioritized instruction, had effective principal leadership, and maintained positive school environments.

School Climate and Principal Leadership

Influential principals who can create a positive climate reinforcing student achievement are indispensable (Palmer, 2016). According to Eller and Eller (2009), the principal is responsible for assessing the school's climate and supporting the staff in making changes. Smith et al. (2005) examined the positive impact of principals who spend time with their students and staff, yielding positive returns, and creating an optimal learning environment. Therefore, the principal's ability to diagnose the school's climate is crucial if they are seeking to make a positive impact (Eller & Eller, 2009). Principals are responsible for identifying and meeting the needs of both staff and students, promoting a shared vision, and cultivating a positive school climate (Kelley et al., 2006). Their impact on the school climate is established through relationships, communication, high expectations, and trust (Kutsyuruba et al., 2015).

Effective school administrators create safe school environments and promote positive climates by creating trusting relationships (Kutsyuruba et al., 2010; Walker et al., 2011). Keeping a positive culture intact and on track is a primary duty of school administration (Deal & Peterson, 2016). School leaders are responsible for serving as change agents who improve the school culture and climate (Saleh & Khine, 2014). Many school leaders work to create positive

climates where all students and staff can be successful (Smith et al., 2020). Effective principals know how their changes influence the school environment (Smith et al., 2020).

According to Eller and Eller (2009), rapport, trust, and climate are crucial components of the success of schools and their principals. Since the school climate is primarily based on the sustainability of positive relationships, quality relationships are based on trust (Kutsyuruba et al., 2015). Since trust relates so closely to climate, the development of trust positively impacts student achievement (Eller & Eller, 2009). For example, a comprehensive analysis by Tschannen-Moran and Gareis (2015) studied the correlations between school climate, faculty trust in the principal, student achievement, and principal leadership behaviors. Two school districts were examined, and data was collected from 64 schools at all levels (Tschannen-Moran & Gareis, 2015). According to Tschannen-Moran and Gareis, student achievement is higher if the staff trusts the principal. Therefore, if the staff does not trust the principal, creating a positive school climate and fostering student achievement will be difficult (Tschannen-Moran & Gareis, 2015). Researchers suggest that student academic success is influenced by a principal who focuses on instruction, as the principal is responsible for academic achievement (Kelley et al., 2006; Waters et al., 2004). Forsyth (2008) reported that the ability of teachers to trust the principal correlates to their ability to lead effectively.

According to Dutta and Sahney (2021), the principal's instructional leadership also directly affects the school climate. Principals need to know that creating a positive school climate is vital to addressing school challenges, and effective instructional leadership plays an important part (Murtedjo & Suharningsih, 2018). Principals are responsible for guiding the instruction framework, which can be accomplished by creating an education-friendly environment (Murtedjo & Suharningsih, 2018). The principal can build an instructional climate

for teachers that fosters high academic achievement (Murtedjo & Suharningsih, 2018). A principal with effective managerial and leadership skills can optimize the school climate by reducing the constraints placed on teachers from the district, parents, and colleagues. If the principal is a transformational leader invested in their certified and classified staff, students, parents, and the community, the school will become a more positive environment (Murtedjo & Suharningsih, 2018).

Gülşen & Gülenay (2014) identified an administrative dimension the principal must possess to develop a positive climate. “The four characteristics of the administrative dimension include the following: (a) impact, the principal’s ability to influence the staff; (b) caring, the ability to serve in a friendly and supportive manner; (c) initiator effect, the principal’s ability to identify their expectations and standards; and (d) support of resources, the principal’s ability to supply the necessary resources needed in the environment for learning” (Gülşen & Gülenay, 2014, p. 95). Thus, a healthy school climate will be formed if the principal consistently demonstrates these four characteristics (Gülşen & Gülenay, 2014). Also, schools with positive climates have principals who connect with teachers, provide effective leadership, and prioritize student achievement (Smith et al., 2020). The principal should guide instruction and initiate the structures for students’ success, which will influence the organizational climate (Smith et al., 2020).

While the relationship between principal behaviors and school climate is documented in the literature, challenges arise. Principals in Drago-Steveson’s (2012) study differentiated their responsibilities into three different roles: instructional leaders, managerial leaders, and visionary leaders. They found that while principals’ leadership behaviors influence the school climate, the role of the principalship has significantly changed in recent years (Drago-Steveson (2012). As a

result, principals struggle with creating a positive school climate while increasing student achievement, attending to students' and staff's social and emotional needs, and following directives from the district level. Teacher shortages, turnover, and increasingly diverse populations are also among the issues that challenge principals as they seek to influence school climate (Drago-Severson, 2012).

According to Crowther et al. (2008), principalship is the key to advancing the cause of teacher leadership, which impacts school culture and climate. School culture is shaped by numerous factors that affect student well-being. Principals can influence students' self-belief positively, teachers' perceptions of students' self-belief, and teachers' sense of self-belief (Crowther et al., 2008). Culture building, identity generation, and school achievement are inseparable from the principal's leadership (Crowther et al., 2008). Crowther et al. (2008) also stated that distinctive climate-building with core values as a basis for the school's core operation represents a vital leadership skill.

School Climate and Teacher Leadership

As the teaching force is diverse and efforts are being made to ensure equity, principals must be the catalyst in creating an inclusive environment to promote success for all (Smith et al., 2020). According to Eller and Eller (2009), working with teachers and school staff is the first step in building a school climate. Effective leaders know relationships among teachers are key to developing positive school climates (Smith et al., 2020). According to Drago-Severson (2012), developing school climates with effective professional learning communities can assist with increasing student achievement and retaining qualified staff.

“The term teacher leadership refers to that set of skills demonstrated by teachers who continue to teach students but also have an influence that extends beyond their own classrooms

to others within their own school and elsewhere” (Danielson, 2006, p.12). Teacher leaders must have the skill set to equip children to become critical thinkers in a global world (Danielson, 2006). Therefore, in order to serve in this capacity, you must be able to mobilize, collaborate, and help others improve student achievement (Danielson, 2006). Therefore, Teacher leaders must have a passion for the school's core mission and have the skill set to influence their colleagues (Danielson, 2006). Given today’s challenging educational context, principals must know how to shape positive climates that promote teacher leadership (Drago-Severson, 2012). The Drago-Stevenson (2012) study offered insight into supporting the growth of educators by pinpointing effective approaches to creating working conditions that guide teacher development. School leaders must support teachers in their learning, as this helps improve schools and ensure that students and teachers keep growing (Drago-Steverson, 2012).

To improve instruction, principals must know how to guide the professional learning community, understand the curriculum, and navigate the demands of teachers' instructional needs, which requires wearing multiple hats (Drago-Steverson, 2012). Unfortunately, many principals have not been trained to support teachers in this manner. “Leithwood (1992, p. 301-302) presented four guidelines that principals should use for creating learning-oriented environments and developing teacher leaders:

1. Treat the teacher as a whole person.
2. Establish a school culture based on technical collaboration and professional inquiry norms.
3. Carefully diagnose the starting points for teacher development.
4. Recast routine administrative activities into powerful teacher development strategies.”

To achieve this type of learning-oriented environment, principals must cultivate their environments to support teachers in cultivating an environment for teacher learning (Drago-Steveson, 2012).

According to the principals in the Drago-Stevenson (2012) study, investing time into relationships with teachers was vital to shaping the climate for adult learning. Additionally, the principals identified four factors they used to develop teacher leadership, including teachers sharing their leadership skills, building relationships, guiding teachers to facilitate change, and being inclusive to all staff (Drago-Steveson, 2012). In addition, principals must prioritize having teachers as integral members of the decision-making process, mainly by providing each other with feedback (Drago-Steveson, 2012). Most principals expressed teachers' difficulty in providing their colleagues with critical feedback; as a result, principals explained the importance of modeling this skill to develop teacher leadership (Drago-Steveson, 2012).

To be an effective teacher leader, teachers need to maximize their use of instructional time. Teachers' management of instructional time encompasses optimizing the time allocated to teaching and learning, establishing classroom environments conducive to an effective teaching pace, and empowering students to own their learning in a manner suitable for their age (Leithwood & Sun, 2018). Furthermore, Heck & Hallinger (2014) identified the following as skills of an effective teacher leader: having high time on task for instruction; providing student work in multiple ways; using various instructional strategies; providing instruction that is meaningful and engaging; collaborating with colleagues on the curriculum; providing professional development activities related to teaching and learning; reflecting on their practice to improve instruction, providing students with additional assistance when needed; and students are given the opportunity and time to master skills.

Constantly reflecting on their practice and changing when necessary is a method for improving student academic success (Heck & Hallinger, 2014). Additionally, the school's instructional environment impacts student achievement shaped by teacher leadership (Heck & Hallinger, 2014). Though school leadership is essential to culture and climate, teachers' instructional practices reflect the climate in the individual classroom environment (Heck & Hallinger, 2014). Heck and Hallinger's (2014) study shows that classroom conditions and teachers' performance correlate with student achievement.

Lee et al., (1999) showed that student achievement increases when teachers believe they can positively influence student outcomes through collective actions. Lee et al. (1999) viewed teacher expectations and leadership as essential factors influencing students' academic achievement. Additionally, Jussim (1986) listed three factors in the educational environment that impact student achievement based on teacher leadership: (a) teachers' expectations for student learning, (b) teachers differentiate based on student needs, and (c) students know what to expect based on these expectations. Teacher expectations and leadership significantly influence students' achievement and may impact students who may see themselves as successful or a failure (Danişman, 2017). According to Danişman (2017), teachers' expectations and leadership impact academic success most.

The quality of the teacher-student relationship is key in shaping the environment (Kutsyuruba et al., 2015). The foundation of a high-quality school is a climate shaped by effective teaching, strong leadership, dedicated staff, a sense of community, and motivated students (Alliance for the Study of School Climate, 2011). When teachers have low expectations of students, they doubt their abilities and do not engage them in learning (Shochet & Smith, 2012). By contrast, in schools with higher academic expectations where teachers have lofty

goals, principals support teachers in achieving these goals, and students respond positively, work hard, and are engaged in learning. (Hoy et al., 2002). Stronge (2010) suggested that teachers must provide quality teaching and be effective teacher leaders to improve schools and impact students' lives. Kutsyruba et al. (2015) research emphasized the significance of positive teacher-student experiences, the perceptions among high-quality teachers, and their impact on academic achievement and student discipline, and concluded that climate plays a major role.

School Climate and Student Discipline

Studies indicate that climate influences student success, including academics and character development (Gage et al., 2016). Student discipline is the strategies and support systems that guide children in learning to develop safe, socially responsible behavior that promotes self-respect and respect for the feelings and property of others (Procedural Directives—Albuquerque Public Schools, 2022). Discipline differs from punishment as students are provided with consequences for inappropriate behavior, and it focuses on guidance and teaching that promotes positive behavior (Procedural Directives—Albuquerque Public Schools, 2022). Schools with disorderly environments have challenging climates, described by low expectations and little structure, processes, and procedures (Kutsyruba et al., 2015). These climates are ineffective and can damage students' overall success, especially for students who need clear, explicit, and detailed expectations (Jimerson et al., 2006). Therefore, improving the school climate prevents academic failure and behavioral challenges (Gage et al., 2016).

In their study, Irvin et al. (2004), highlighted that multiple characteristics influence the school climate. These include student behavior and attitudes, the characteristics of the school and the classroom, and the opinions and perceptions of the school community educators and students, specifically regarding school safety and effectiveness (Irvin et al., 2004). In a study by Wang

(2009), the relationship between middle school students' views on school climate and their involvement in deviant behaviors and depressive symptoms was investigated. Wang's (2009) findings indicated that students who perceived a positive environment were less inclined to engage in problematic behaviors as well as less likely to report depressive symptoms. Wang et al. (2010) examined sixth-graders' perceptions on school climate and the chances of those students having behavior challenges in seventh and eighth grades. Based on their responses, students with good relationships with their teachers had fewer behavior problems (Wang et al., 2010). There are still unknown factors regarding school climate that predict behavioral outcomes; school climate must be considered when schools are working to reduce challenges with student behavior (Gage et al., 2016).

How teachers manage the classroom and use different disciplinary strategies can influence students' views on the school environment (Mitchell & Bradshaw, 2013). Effectively managed classrooms have been proven to enhance academic performance and reduce behavioral issues, ultimately leading to a positive school climate (Arbuckle & Little, 2004). Classroom management involves providing students with clear rules, processes, and procedures in a safe classroom where all students can learn, supporting students experiencing a positive school climate (Little & Akin-Little, 2008). According to research conducted by Gage et al. (2016), schools where teachers have effective classroom management have fewer discipline referrals, which is also a factor in increasing school climate. Additionally, students with severe behavioral concerns need teachers who can teach appropriate social and behavioral skills, as these students' academic performance is often worse (Gage et al., 2016). Consequently, Gage et al. (2016) suggested that schools should incorporate multiple levels of support to establish positive environments that reinforce appropriate behavior, supporting all students' needs.

The atmosphere within a school influences the conduct of students and staff, thus influencing the overall school environment or climate (Orozco-Solis et al., 2016). Research from Azevedo et al. (2021) demonstrates interactions between organizational health, student and staff relationships, and behavior. Four factors are associated with school climate that impact student discipline: safety, academic program, relationships, and the aesthetics of building (Thapa et al., 2013; Cohen et al., 2009; NSCC, 2012). According to Nunes et al. (2017), school impacts children's individual and social functioning, and the climate should be designed to identify and manage significant disruptive behavior. In longitudinal studies by Dorio et al. (2019), it was determined that if the school climate survey results were low, there was a higher probability of constant behavior issues. According to the Centers for Disease Control and Prevention (2009), there is a direct correlation between the environment and the promotion of healthy relationships, school connectedness, student engagement, reduced dropout rates, decreased student absences, and decreased behavior incidents. Schools must be safe, warm, and welcoming, which will help decrease distributive behavior and increase school climate (Johnson, 2009). According to Azevedo et al. (2021), students who did not function well in the environment and perceived it as negative had the most office discipline referrals. In contrast, students who considered the climate good had fewer behavior problems. Based on these results, students in a poor environmental structure without relationships reported more behavior disruptions (Azevedo et al., 2021).

When determining if the conditions of a school climate are positive, school safety must be considered, as safety is also associated with student discipline (Kutsyuruba et al., 2015). Students must feel safe to learn (Kutsyuruba et al., 2015). This environment enables administrators to focus on reaction and response, which creates an environment for reinforcing positive student discipline. School life encompasses safety, relationships developed within the

school community, and the common goals all share, highlighting the physical and social aspects Cohen et al. (2009).

School Climate and Teacher Retention

Retaining staff has become very difficult and a problem in education (Harper, 2009). Several factors are considered when researching teacher retention. Those factors include job satisfaction, being treated as a valued employee, principal leadership, and school climate (Dahlkamp et al., 2018). Low teacher retention could adversely affect student success and the school's climate (Joiner, 2009; Kukla-Acevedo, 2009). Even if schools are led by “good principals,” teachers leave the profession if the climate is not collaborative and inviting (Devos & Bouckennooghe, 2009). The retention of teachers within the profession is influenced by the principals' leadership and the overall climate. Teachers say that principals with effective leadership skills are a significant consideration in the decision to remain at or leave the school, and teachers often decide to stay if the school climate is positive (Ndoye et al., 2010).

As teachers decide whether to remain or depart from the profession each year, many teachers in high-demand schools decide to move to a different location or leave the profession (Dahlkamp et al., 2018). Due to the revolving doors and low teacher retention in a district, student achievement is disrupted, and the district's budget is also impacted by money spent on constantly recruiting replacement teachers (Joiner, 2009). When teachers exit the campus, professional relationships and learning are disrupted (Dahlkamp et al., 2018). Perrachione et al. (2008) discussed several factors that an effective leader must exhibit to keep teachers in the building, such as ongoing support for beginning teachers, providing higher pay, valuing teachers' input, and creating consistent policies and procedures to reduce student behavior issues.

Students cannot be successful without an effective principal who knows how to retain teachers effectively (Tschannen-Moran & Gareis 2004). Waddell (2010) identified factors influencing teacher retention, which include (a) a professional work environment with positive working conditions and newer buildings with up-to-date technology and equipment. Furthermore, workplace conditions influenced first-year teachers' decision to remain in the profession (Kukla-Acevedo, 2009). The school environment and the principal's impact are crucial factors in teacher retention (Dahlkamp et al., 2018).

A two-part study on retention and in-district mobility in which they determined school climate was a factor (Elfers et al., 2006). This study reviewed teacher mobility within the state, district, and school levels. The results of the survey indicated that most teachers considered how well they work with others and principal leadership when determining if they wanted to remain (Elfers et al., 2006). However, some teachers remained at the school with an effective principal even if they did not perceive the climate as positive (Elfers et al., 2006). Smethem (2007) examined the retention of beginning teachers and found that negative interactions with colleagues and the school climate reduced teachers' overall desire to stay in the profession.

Kukla-Acevedo (2009) researched whether the climate impacts their choice to stay. This study reviewed three variables that represented teachers' perceptions of the working conditions: decisions they could make about their classroom, principal support, and student behavior conditions. Principal support was the strongest factor of those variables, as student behavior and classroom autonomy did not influence the teacher remaining at the school. However, when the variables were combined and categorized as school climate, it significantly impacted teacher turnover. Douglas (2010) reviewed the relationship between elementary schools and the climate. Based on the findings, elementary teachers stated that school climate was a determining factor in

their remaining at the school. Principals impact school climate directly, impacting teacher retention (Devos & Bouckenooghe, 2009).

Many people choose to become educators because they believe that the combination of salary, benefits, summers off, and their desire to make a difference makes it a good career choice (Guarino et al., 2006). Once they begin teaching, they continue to look for a school environment that supports the conditions in which they desire to work (Kukla-Acevedo, 2009). Staff turnover compromises student learning in the educational system as when teachers leave, there is a gap in student learning, and it costs the district to hire and onboard new employees (Kukla-Acevedo, 2009). Additionally, low-performing schools often have low retention rates, and those positions are often filled with inexperienced teachers. As a result, low-performing schools have ineffective teachers who hurt student growth (Lankford et al., 2002).

Several factors impact staff retention. These factors are the demographics, socioeconomic factors, working conditions, and the ascetics of the building (Kukla-Acevedo, 2009). Research shows that teachers are more prone to leave urban schools that serve high-poverty populations and have a large percentage of minority students. This suggests that the challenges associated with teaching in these settings may contribute to higher turnover rates among educators. Understanding the effects of the school climate on teacher turnover is critical as it can help develop a supportive workplace conducive to teacher retention (Kukla-Acevedo, 2009). School officials can take proactive steps to improve working conditions and ultimately encourage teachers to stay by addressing the challenges teachers face in low-performing schools.

Summary

This chapter presents the literature on the history of school climate. It also discusses the relationship school climate has between academic achievement, principal leadership, teacher

leadership, student discipline, and teacher retention. Multiple studies and scholarly articles about school climate were reviewed and noted. Multiple studies noted that school climate is one of the primary factors for predicting and increasing academic achievement. It was found that the climate of a school is closely linked to students' academic progress, and can be used to forecast student achievement (Davis & Warner, 2015). Additionally, based on research, principal leadership and keeping a positive culture intact and on track are the primary duties of school leaders (Deal & Peterson, 2016). School leaders are essential in creating positive climates by developing relationships with students and staff, developing a strong academic program, creating a vision, and establishing goals the school community can achieve.

Given today's challenging educational context, principals must know how to shape positive climates that promote teacher leadership (Drago-Severson, 2012). Furthermore, teacher expectations and leadership significantly influence students' achievement (Danişman, 2017). According to Gage et al. (2016), schools where teachers provide clear academic and behavioral expectations tend to foster a positive school climate. Improving the working conditions can also improve academics and student behavior (Gage et al., 2016).

Dahlkamp et al. (2018) suggest a correlation between teacher retention and school climate. Retaining teachers is difficult (Harper, 2009). Additionally, studies suggest a direct relationship between a teacher's decision to remain or leave the profession based on the principal's leadership and the overall school climate (Dahlkamp et al., 2018). Chapter 3 will provide a comprehensive overview of the methodology employed in this quantitative study, detailing the research design, participant selection, data collection, and analysis.

CHAPTER 3: METHODOLOGY

Introduction

This quantitative study aimed to determine whether there are statistically significant differences in certified staff members' perceptions of principal leadership, teacher leadership, student discipline, and teacher retention based on schools' EVAAS growth status and performance grade. This section presents the rationale behind using a quantitative approach and describes the specific inquiry strategy. A quantitative approach allowed me to investigate the data collected while comparing multiple variables. Additionally, I provided a detailed outline and description of the data collection and analysis methods. Utilizing a quantitative approach enabled me to effectively analyze preexisting data, providing better control over potential biases.

This study's participants were certified staff members from the 293 low-performing public elementary schools during the 2021-2022 school year in North Carolina. Low-performing schools are identified each year based on specific criteria: "those that receive an overall performance grade of D or F and a growth score categorized as either met expected growth or not met expected growth" (Identification of Low-performing Schools, 1997). Data for this study were also gathered from the 2022 NCTWCS survey results, with the school serving as the unit of analysis. Certified staff members' responses to the survey items were converted into school-level statistics.

The statistical method I employed was a 2 x 2 factorial multivariate analysis of variance (MANOVA). MANOVA is a statistical test designed to assess whether significant differences exist in the impact of one or more independent variables on a set of two or more dependent variables (Weinfurt, 1995). I used a MANOVA design instead of a series of separate ANOVA designs because the dependent variables (principal leadership, teacher leadership, student

discipline, and teacher retention) are all correlated, as the literature has identified these variables as factors associated with school climate (Weinfurt, 1995). These four variables are all measured on the NCTWCS, which measures school climate (North Carolina Teacher Working Conditions Survey, 2022).

Participating Schools

The 293 low-performing elementary schools included grades from pre-kindergarten through fifth grade. Of the 293 schools, 210 received a school performance grade of D, while 83 had a grade of F. Among these, 199 schools achieved an EVAAS growth status of "met," whereas 94 schools were categorized as "not met." When analyzing the schools based on their performance grades, 152 schools received a D and had an EVAAS growth status of "met," while 58 schools with a school grade of D had an EVAAS growth status of "not met." Additionally, 47 schools had a grade of F that met the EVAAS growth expectations, and 36 schools with an F that did not meet. Appendix E provides a complete list of the percentage of people participating at each school.

Certified staff members at low-performing public elementary schools that served students in pre-kindergarten through fifth grade during the 2021-2022 school year consisted of the sample for this study. Certified staff members included school administrators, teachers, counselors, speech pathologists, psychologists, and social workers. There are no identifying factors for each school's certified staff members. The survey sought to gather perceptions from staff members regarding various elements of the school climate rather than focusing on individual perspectives, and the unit of analysis is the school (North Carolina Teacher Working Conditions Survey, 2022). Additionally, no questions refer to an individual educator or specifically ask about subjects or grade levels. The survey includes demographic questions; however, the responses are

analyzed and reported only at the state, not the district or school level (North Carolina Teacher Working Conditions Survey, 2002).

There were 11,018 staff members from 77 districts, and 293 schools completed the survey. The schools are located all over the state, with most in the piedmont-triad, followed by the southwest and north-central regions. The average percentage of economically disadvantaged students was 57.4%. Additionally, each school had an average of 37 certified staff members.

Table 2 presents a list of the districts and schools organized by region.

Table 2

List of Low-Performing Elementary Districts and Schools by Region

Region	Districts/Schools
Northeast	Bertie: West Bertie, Colerain Currituck: Central Dare: Manteo Halifax: Everetts, Hollister, Pittman Hertford: Riverview Roanoke Rapids City: Belmont Martain: South Creek Northampton: Central, Willis Hare Pitt: Ayden, Belvoir, Falkland, Lakeforest, Northwest, Wahl Coates Tyrrell: Tyrrell Elementary Vance: Carver, Clarke, New Hope, EO Young Jr., EM Rollins Washington: Creswell, Pines Total Districts: 13 Total Schools: 26
Southeast	Brunswick: Bolivia Craven: JT Barber, Oaks Road, Roger Bell New Tech Academy Jones: Maysville, Trenton Lenoir: LeGrange, Northeast New Hanover: R Freeman School of Engineering, John J Blair, Wrightsboro

Table 2*List of Low-Performing Elementary Districts and Schools by Region (continued)*

	<p>Onslow: Hunters Creek, Southwest, Summersill</p> <p>Pender: Cape Fear, Rocky Point</p> <p>Wayne: Eastern Wayne, Tommy's Road</p> <p>Total Districts: 8</p> <p>Total Schools: 18</p>
North Central	<p>Chatham: Siler City</p> <p>Durham Public: Hilandale, Lakewood, Parkwood, CC Spaulding, WG Pearson, YE Smith</p> <p>Edgecombe: GW Bulluck, Coker-Wimberly, Princeville, Stocks</p> <p>Franklin: Bunn</p> <p>Granville: C.G. Credle, Creedmoor, Mount Energy, West Oxford</p> <p>Harnett: Boone Trail, Coats, Johnsonville, Lillington-Shawtown, Overhills</p> <p>Johnston: West Clayton, West Smithfield, South Smithfield</p> <p>Nash: Bailey, Cedar Grove, Middlesex, Spring Hope</p> <p>Wake County: River Bend, Aversboro, Banks Road, Baileywick Road, Brier Creek, Dillard Drive, Durant Road, East Garner, Forest Pines, Fuquay-Varina, Green, Harris Creek, Lockhart, Millbrook, Powell, Rand Road, Smith, Southeast Raleigh, Vandora Springs, Wake Forest, Wakefield, Wakelon, Wilburn, Zebulon</p> <p>Warren: Mariam Boyd, Vaughan</p> <p>Wilson: John W Jones, Margaret Hearne, Vick</p> <p>Total Districts: 12</p> <p>Total Schools: 57</p>

Table 2*List of Low-Performing Elementary Districts and Schools by Region (continued)*

Sandhills	Columbus: Chadbourn, Tabor City Cumberland: Elizabeth M Cashwell, Margaret Willis, Montclair, William H Owen Hoke: West Hoke, Sandy Grove Moore: Aberdeen, Robbins, Southern Pines Richmond: West Rockingham, Washington Street Roberson: Pembroke, Rex-Rennert Sampson: Roseboro Scotland: Laurel Hill, Wagram Total Districts: 8 Total Schools: 18
Piedmont-Triad	Alamance-Burlington: Grove Park, Harvey R. Newlin, Haw River, Hillcrest, North Graham, South Graham Asheboro City: Balfour Caswell: Oakwood, South Davidson: Brier Creek, Southmont, Denton, Fair Grove, Silver Valley, Tyro Davie: Mocksville Guilford: Edwin A Alderman, Allen Jay, Bessemer, Brightwood, Monticello-Brown Summit, Caesar Cone, Fairview, Waldo C Falkener, Cyrus P Fraizer, Gillespie Park, Guilford, Hunter, Irving Park, James Y Joyner, Kirkman Park, McLeansville, Ronald E. McNair, Montlieu Academy of Technology & Science, Northwood, Oak Hill, Oak View, Parkview Village, Clara J Peck, Reedy Fork, Rankin, Sedalia, Sedgefield, Shadybrook, George C Simkins, Jr., Triangle Lake Montessori, Union Hill, Vandalia, Washington, Wiley Randolph: Liberty, Ramseur Rockingham: Douglass, Huntsville, Lincoln, John W Dillard, South End Stokes: Walnut Cove Surry: Mountain Park

Table 2*List of Low-Performing Elementary Districts and Schools by Region (continued)*

	<p>Winston/Salem Forsyth: Ashley Academy, Bolton, Brunson, Caleb's Creek, Forest Park, Griffith, Hall-Woodward, Kimberley Park, Kimmel Farm, Diggs-Latham, Mineral Springs, Moore Magnet, North Hills, Smith Farm, South Fork, Speas, Union Cross, Walkertown, Ward</p> <p>Yadkin: Jonesville, West Yadkin</p> <p>Total Districts: 12</p> <p>Total Schools: 84</p>
Southwest	<p>Cabarrus: Rocky River, Winecoff, WM Irvin</p> <p>Charlotte-Mecklenburg: David Cox, Hickory Grove, Hornets Nest, Huntingtowne Farms, Joseph W Grier, Lebanon Road, Monclaire, River Oaks, Pinewood, Piney Grove, Reid Park Academy, Starmount Academy of Excellence, Sterling Winding Springs*, Winget Park</p> <p>Cleveland: Township & Washington</p> <p>Kannapolis: Forest Park</p> <p>Gatson: Carr, Chapel Grove, Costner, Edward D. Sadler Jr., Gardner Park, Lingerfeldt, Pleasant Ridge, Robinson, Sherwood, HH Beam, Tryon, Woodhill</p> <p>Iredell-Statesville: Cloverleaf, East Iredell, NB Mills, Scotts, Third Creek, Union Grove</p> <p>Lincoln: Battleground, Love Memorial, Childers, S Ray Lowder</p> <p>Montgomery: Candor</p> <p>Rowan-Salisbury: China Grove, Koontz, Shive, Granite Quarry, Isenberg, Dole, Hurley, Knollwood, Morgan, North Rowan</p> <p>Stanly: Aquadale, Edny</p> <p>Union: Benton Heights, East, Porter Ridge, Union, Walter Bickett, Western Union, Wingate</p> <p>Total Districts: 11</p> <p>Total Schools: 65</p>

Table 2*List of Low-Performing Elementary Districts and Schools by Region (continued)*

Northwest	Alexander: Hiddenite, Wittenburg Avery: Newland, Riverside Burke: Forest Hill, Hildebran, Hillcrest, Mountain View, Ray Childers Caldwell: Davenport A+, Dudley Shoals, Gamewell, Sawmills, Whitnel Hickory City: Viewmont Newton Conover City: South Newton McDowell: North Cove, Pleasant Gardens, West Marion Wilkes: Boomer-Ferguson, CC Wright Total Districts: 8 Total Schools: 22
Western	Asheville City: Hall Fletcher Cherokee: Andrews Graham: Robbinsville Henderson: Clear Creek, Edneyville, Sugarloaf, Upward Transylvania: Pisgah Forest, TC Henderson Total Districts: 5 Total Schools: 9

* Indicates the school that will not used in the sample.

Of the 293 schools that were examined, 282 were Title One schools. The ten schools that were not Title One are Caleb's Creek, Union Grove, Hornets Nest, Winding Springs, East Elementary, Western Union, Banks Road, Brier Creek, Fuquay-Varina, Harris Creek, and Rand Road. In the Title One schools, the percentage of low-income students varied from 27.1% to 90.1%. Typically, Title One provides extra help through funding to assist students with the greatest need (Onslow County Schools, 2022). Approximately half of North Carolina schools in all 115 districts receive Title One funds (Onslow County Schools, 2022).

Data Collection Process

The data was available on two public websites; therefore, I was not required to complete the Institutional Review Board (IRB) process. The first data source was from the 2022 NCTWCS (www.nctwcs.org). The NCTWCS website provides information about the survey, previous years' survey results, frequently asked questions, resources, and research that supports the survey (North Carolina Teacher Working Conditions Survey, 2022). The NCTWCS survey was electronically disseminated to all certified staff members in public schools. The survey window is open for one month, usually March 1 - March 31. The certified staff members completed the NCTWCS anonymously. Each school designated a staff representative responsible for providing each staff member with an individualized code to enter to complete the survey. The appointed representative organized a faculty meeting to clarify the survey's purpose and provide instructions for completion. After the meeting, the representative distributes the unique survey code to ensure individual confidentiality (North Carolina Teacher Working Conditions Survey, 2022). The survey takes around 20 minutes to finish, and during the open survey window, the completion rate for each school is displayed on the NCTWCS website. The participation rates are reported in real-time on the NCTWCS website (www.nctwcs.org).

Participation in the survey is highly encouraged. During the 2022 NCTWCS, there was a 91.96% response rate across North Carolina, with 112,529 responding out of 122,371 invitees, with 41 school districts having a 100% response rate (North Carolina Teacher Working Conditions Survey, 2022). Several prizes were given away during the survey window to promote participation throughout the state. Prizes consisted of the fastest school (first school to reach 100% participation); all schools that reach 100% on the first day the window opens are also eligible for a prize given at each level (North Carolina Teacher Working Conditions Survey,

2022). Additionally, there is a prize for the first district that reaches 100% participation; weekly drawings are held for all schools that reach 100% participation. There is also a prize for “in the nick of time,” in which a drawing was held for schools that reach 100% participation on the last day of the survey (North Carolina Teacher Working Conditions Survey, 2022). The prizes range from \$500 to \$1500. The final survey results are available on the NCTWCS website during the month of May (North Carolina Teacher Working Conditions Survey, 2022). Districts are provided data protocols to assist with data analysis. According to the NCTWCS website (2022), the survey results help administrators understand the working conditions in their schools, which aids in implementing short- and long-term research-based strategies for improving schools.

The 2022 low-performing school list on the North Carolina Department of Public Instruction (NCDPI) website was the second data source. Each September, NCDPI publishes the student test performance results from the previous school year. The results consist of participation rates by subgroup, disaggregated data on end-of-grade tests in reading and math (grades 3-8), science (grades 5 and 8), end-of-course tests in (Biology, English II, Math 1 and 3), ACT results, Workkeys results, English language learners progress, EVAAS growth data, school performance grades, and graduation rates (Maher & Howard, 2022). Following a formal presentation of the data to the North Carolina State Board of Education, an Excel spreadsheet with the disaggregated data is released for the public to review with the low-performing schools identified.

Research Questions

With the increasing number of low-performing elementary schools in North Carolina, it is important to analyze the factors that influence the climate in these schools. Understanding principal leadership, utilizing teacher leadership, improving student discipline, and retaining

teachers are critical to improving working conditions. This study investigated how the EVAAS growth status and school performance grade affect certified staff members' perceptions of school climate regarding the variables of interest in low-performing elementary schools in North Carolina. To achieve this goal, this study addressed the following research questions:

1. Are certified staff members' perceptions of principal leadership significantly different according to the EVAAS growth status and school performance grade in low-performing elementary schools in North Carolina?
2. Are certified staff members' perceptions of teacher leadership significantly different according to the EVAAS growth status and school performance grade in low-performing elementary schools in North Carolina?
3. Are certified staff members' perceptions of students' discipline significantly different according to the EVAAS growth status and school performance grade in low-performing elementary schools in North Carolina?
4. Are certified staff members' perceptions of teacher retention significantly different according to the EVAAS growth status and school performance grade in low-performing elementary schools in North Carolina?

Research Design

I employed a 2 x 2 factorial MANOVA research design for this dissertation. Specifically, the 2 x 2 factorial MANOVA examined the EVAAS growth measure (met or not met) and the school performance grade from each school (D or F) on certified staff perspectives of principal leadership, teacher leadership, student discipline, and teacher retention. Under principal leadership, 11 items were examined; teacher leadership, eight items; student discipline, seven

items; and one item, under teacher retention, was examined. Each area's ratings were integrated into one value for each school.

Multivariate Analysis of Variance (MANOVA) is a statistical technique used to examine variations in the means of a set of dependent variables when there are two or more levels of at least one independent variable (Young, 2006). It extends ANOVA (Analysis of Variance) by simultaneously incorporating multiple dependent variables in one MANOVA model (Young, 2006). The two essential circumstances in which MANOVA can be used are when there are numerous correlated dependent variables and to examine how independent variables impact some arrangement of responses for the dependent variables (Carey, 1998). Huberty and Morris (1989) provided three reasons for considering MANOVA: identifying outcome variable constructs, selecting variable subsets, and determining a variable's relative worth.

Hair et al. (1995) suggested that MANOVA can be used to control statistical accuracy and efficiency while still providing ways for testing multivariate questions. Tatsuoka's (1973) research aligns with the recommendations of Hair et al. (1995). He stated that although it may be more important to look at each dependent variable individually, doing so detracts from the effectiveness of measuring variables simultaneously (Tatsuoka, 1973). If a researcher understands the need for a multivariate analysis, the multiple measures "can throw light on how each one contributes to the relation" (Tatsuoka, 1973, p. 273; Tatsuoka & Lohnes, 1988). As described by Cooley & Lohnes (1971), Hair et al. (1995), and Tatsuoka (1973), MANOVA is an appropriate method of analysis when a researcher has multiple continuous dependent variables and one or more categorical independent variables, each with two or more levels. I decided to use a factorial MANOVA design instead of an ANOVA design because the dependent variables

(principal leadership, teacher leadership, student discipline, and teacher retention) are all correlated.

Positionality Statement

I am a Black woman who grew up in Pinetops, a small rural town in eastern North Carolina. As a school-aged student, I struggled academically during my elementary and junior high school years. However, I found success in high school. As a first-generation college student, I ventured off to North Carolina Agricultural and Technical State University, earning bachelor's degrees in social work and special education and a master's degree in school administration.

I have served professionally as a special education teacher, assistant principal, principal, school leadership coach, executive director of administrative services, and chief student services officer. Throughout my career, I served in low-performing Title I schools in multiple counties in North Carolina. As an educator, I served at all three levels in Title I schools in large urban and mid-size rural districts. As a school leadership coach with NCPDT, I served at low-performing elementary and middle schools in multiple school districts across the state. I currently serve as the chief student services officer in a district of 38 schools, with 13 low-performing schools in a mid-size rural school district.

Under my leadership, all the schools I served as principal were removed from the low-performing school list. As an administrator, all the schools I led had an EVAAS growth status of “exceeded growth” or “met growth.” Based on these experiences, I acknowledge my potential biases. I chose to carry out a quantitative study because I want my experiences and opportunities to be separate from the interpretations and analyses of this research. Conducting a quantitative study also guarantees the reliability and validity of participants' responses, ensuring that the research findings will not be compromised.

Instrumentation

The North Carolina Teacher Working Conditions Survey (NCTWCS) originated as an initiative from former Governor Jim Hunt’s administration (North Carolina Teacher Working Conditions Survey, 2022). In 1999, the North Carolina Professional Teaching Standards Commission (NCPTSC), with assistance from the North Carolina State Board of Education, carried out an extensive review of recent research on assessing school teaching conditions and their effects on teachers' careers (North Carolina Teacher Working Conditions Survey, 2022). This review guided the creation of the North Carolina Teacher Working Conditions Survey, which sought to collect comprehensive information about the working conditions faced by teachers throughout the state (North Carolina Teacher Working Conditions Survey, 2022). “The review included analyses of state and national survey data from the Schools and Staffing Survey, a nationally representative survey” (North Carolina Teacher Working Conditions Survey, 2022). Following this review, the NCPTSC established standards for teaching conditions in schools, which the North Carolina State Board of Education adopted in 1999 and included in the North Carolina Teacher Working Conditions Survey (North Carolina Teacher Working Conditions Survey, 2022). The survey was administered statewide for the first time in 2002, making North Carolina the first state in the country to investigate teacher working conditions by directly surveying teachers (North Carolina Teacher Working Conditions Survey, 2022).

The questions in the NCTWCS survey are designed based on the NC State Board of Education's Statewide Standards for Teaching Conditions, which were externally validated during the Gates MET Study (North Carolina Teacher Working Conditions Survey, 2022). The Gates MET Study, funded by the Bill & Melinda Gates Foundation and designed by researchers including Stecher et al. (2018), aimed to enhance student outcomes by expanding students'

access to effective teaching over several years. The schools involved in the study implemented strategies to evaluate teaching effectiveness, which included assessing the teacher's influence on student achievement and using a structured observation rubric to evaluate teaching practices (Stecher et al., 2018). Additionally, the survey is based on research from Ingersoll et al. (2018), which states that students in schools with high-quality teachers tend to perform at least ten percentage points higher on standardized tests in reading and math.

Using the Teaching, Empowering, Leading, and Learning (TELL) survey, data was analyzed from 16 states from 2011-2015, with responses from over 880,000 certified staff members in 24,645 schools (Ingersoll et al., 2018). The external validity of this survey was assessed by the structure of the response rate and alignment between survey items and the constructs of teaching and learning, time, teacher leadership, facilities and resources, professional development, community support and involvement, school leadership, and managing student conduct (New Teacher Center, 2013). Additionally, the Rasch Rating Scale was employed to conduct a thorough analysis of several key aspects, including the correlations between individual items and overall measurements, the fit of each item within the scale, the effectiveness of the rating scale itself, and the overall application of the survey. This robust method allows for a nuanced understanding of how well each survey item performs in relation to the measurement construct, as highlighted by the insights from the New Teacher Center (2013). By utilizing this approach, researchers can ensure the reliability and validity of the survey data collected.

Furthermore, comprehensive internal analyses were performed to assess the reliability and validity of the instrument. This process aimed to confirm its stability and effectiveness across various survey populations. Specifically, we focused on generating internal consistency

estimates, as outlined by the New Teacher Center (2013). These analyses helped ensure that the instrument functions reliably regardless of the diverse groups of participants. Therefore, it was determined that the teacher working conditions survey is one of the largest and most reliable sources of information regarding school climate and student achievement, which is a by-product of the TELL survey (Ingersoll et al., 2018). The survey results are highly valuable and are utilized in school improvement plans, state policies, principal evaluations, and federal legislation (North Carolina Teacher Working Conditions Survey, 2022).

NCDPI created the survey questions, which access multiple areas of the environment comprised of teacher's working conditions (North Carolina Teacher Working Conditions Survey, 2022). The survey application undergoes multiple tests to ensure that data is reliable, and that the website operates properly when launched to over 100,000 participants (North Carolina Teacher Working Conditions Survey, 2022). The NCTWCS assesses teachers' perceptions of different aspects of school climate. Extensive research by prominent external researchers has established correlations between teacher retention, student achievement, and the overall school climate (North Carolina Teacher Working Conditions Survey, 2022).

The 2022 NCTWCS is broken into the following survey sections: “(a) time, (b) facilities and resources, (c) community support and involvement, (d) managing student conduct, (e) teacher leadership, (f) school leadership, (g) professional learning opportunities, (h) instructional practices and support, (i) retention, (j) equity, (k) safety, (l) new teacher supports, and (m) pandemic impact”. In the 2022 NCTWCS, 112,529 certified educators participated in the survey, resulting in a response rate of 91.96% (North Carolina Teacher Working Conditions Survey, 2022). Of specific importance to this study, there were 293 low-performing elementary schools

spanning grades pre-kindergarten through fifth during the 2022 NCTWCS administration (North Carolina Department of Public Instruction, 2022).

The statements from each section were derived from the 2022 NCTWCS. Responses were evaluated using a 4-point Likert-type scale, which included options ranging from strongly disagree and disagree to agree, strongly agree, and don't know. This measured the extent to which certified staff agreed or disagreed with statements regarding principal leadership, teacher leadership, student discipline, and teacher retention. If certified staff members chose the response of don't know, that response is not used in the data as the responses included in this dissertation are strongly agree, agree, strongly disagree, or disagree. The NCTWCS has a total of 13 subsections with a total of 212 questions (North Carolina Teacher Working Conditions, 2022). I am analyzing four subsections with a total of 27 questions. Details pertaining to each subscale were provided in the following sections. I utilized the ratings from certified staff in the school leadership, teacher leadership, managing student conduct, and retention sections of the North Carolina Teacher Working Conditions Survey (2022) to assess school climate.

Principal Leadership

The subscale consists of 11 items using a 4-point Likert scale. It assesses the extent to which certified staff members agree or disagree with statements regarding different aspects of principal leadership in the school. The analysis focused on the percentage of certified staff who strongly agreed or agreed to the 11 items under the Principal Leadership subscale. More specifically, for each item, the school-level percentages were added up to constitute the final percentage. After the item-level percentages were obtained, a final average percentage was calculated to represent the overall school-level perception of principal leadership. The following statements capture participants' perceptions of principal leadership:

- a. “There is an atmosphere of trust and mutual respect in this school.
- b. Teachers feel comfortable raising issues and concerns that are important to them.
- c. The school leadership consistently supports teachers.
- d. Teachers are held to high professional standards for delivering instruction.
- e. The school leadership facilitates using data to improve student learning.
- f. Teacher performance is assessed objectively.
- g. Teachers receive feedback that can help them improve teaching.
- h. The faculty and staff have a shared vision.
- i. The procedures for teacher evaluation are consistent.
- j. The school improvement team provides effective leadership at this school.
- k. The faculty are recognized for accomplishments.”

Teacher Leadership

The sub-scale comprises eight items and utilizes a 4-point Likert scale. It evaluates the degree to which certified staff members agree or disagree with statements concerning teacher leadership in the school. The analysis concentrated on measuring the proportion of certified staff who either strongly agreed or agreed with the eight specific statements outlined in the Teacher Leadership subscale. To achieve this, we first aggregated the school-level percentages for each individual item, which were then combined to form a comprehensive final percentage. Following this, we calculated an average percentage representing the overall perception of teacher leadership at the school level. The subsequent statements encapsulate the participants’ viewpoints regarding the effectiveness of their teacher leadership.

- a. “Teachers are recognized as educational experts.

- b. Teachers are trusted to make sound professional decisions about instruction.
- c. Teachers are relied upon to make decisions about educational issues.
- d. Teachers are encouraged to participate in school leadership roles.
- e. The faculty has an effective process for making group decisions to solve problems.
- f. In this school we take steps to solve problems.
- g. Teachers are effective leaders in this school.
- h. Teachers have an appropriate level of influence on decision making in this school.”

Student Discipline

The sub-scale consists of six items and uses a 4-point Likert scale. It assesses the extent to which certified staff members agree or disagree with statements about managing student discipline in the school. The analysis focused on quantifying the proportion of certified staff who either strongly agreed or agreed with six specific statements from the Student Discipline subscale. To do this, we first aggregated the school-level percentages for each individual item, which were then combined to create a comprehensive final percentage. This was followed by calculating an average percentage that reflects the overall perception of student discipline at the school level. The following statements summarize the participants’ views on the effectiveness of student discipline:

- a. “Students at this school understand expectations for their conduct.
- b. Students at this school follow rules of conduct.
- c. Policies and procedures about student conduct are clearly understood by the faculty.

- d. School administrators consistently support teachers' efforts to maintain discipline in the classroom.
- f. Teachers consistently enforce rules for student conduct.
- g. The faculty work in a school environment that is safe."

Teacher Retention

The sub-scale features a single item and employs a 4-point Likert scale to gauge the extent of agreement or disagreement among certified staff regarding statements about teacher retention in the school. The analysis focused on the percentage of certified staff who strongly agreed or agreed to the one item under the Teacher Retention subscale. The school-level percentage was added up to constitute the final percentage. The following statement captures participants' perceptions of teacher retention:

The following statement, taken from the North Carolina Teacher Working Conditions Survey, was used to assess teacher retention:

- a. "Overall, my school is a good place to work and learn."

Limitations

Several limitations are noted in this study. One limitation is the variation of the total response percentage for the NCTWCS. The survey includes only schools with a response rate of at least 40% and a minimum of five participants. While 212 schools had a complete response rate of 100% to the survey, 82 schools had rates between 44% and 98%. This is a limitation as not all schools are equally represented on the NCTWCS survey, with a 100% response rate. The findings of this sample may not be widely applicable to the entire United States, as it consists of a limited group that surveyed certified staff from low-performing elementary schools in North Carolina.

Additionally, there are many variations of elementary schools in North Carolina, such as kindergarten-fifth grade, kindergarten-third grade, and second grade-fifth grade. However, I am only analyzing schools from pre-kindergarten to fifth grade. There are 581 low-performing elementary schools, which offer a range of grades from pre-kindergarten to fifth grade. This dissertation will examine 293 low-performing elementary schools.

The data that I am examining are not longitudinal. As a result, future research is recommended to review the impact of the EVAAS growth measures and the school performance grades over a series of years. Furthermore, only some of the areas listed on the NCTWCS are being analyzed. Though the survey consists of thirteen areas, this research only reviews four areas during the 2021-2022 school year, which is one moment in time.

The NCTWCS survey was given to certified staff the year after all schools returned from the pandemic; therefore, the timing of the survey is a limitation. After being out of school for approximately a year, teachers experienced new challenges that negatively impacted their working conditions, thus increasing teacher retention (Matthews et al., 2022). This is a limitation because the pandemic was a challenging anomaly for educators. During COVID-19, schools were placed on virtual learning, impacting student academic progress, and many schools struggled with transitioning after the pandemic (Fisher et al., 2022). This challenge disproportionately impacted students from rural areas, poor students, and minority students (Fisher et al., 2022). As a result, this could have impacted the NCTWCS results.

Summary

This quantitative study sought to identify whether there are statistically significant differences in certified staff members' perceptions of principal leadership, teacher leadership, student discipline, and teacher retention related to their EVAAS growth status and school

performance grade. A 2 x 2 factorial MANOVA was employed to fulfill the study's objectives.

Chapter 4 will present the findings and analysis of this research.

CHAPTER 4: DATA ANALYSIS

Overview

This chapter presents the results of the statistical analyses. The initial section summarizes the descriptive statistics for the variables included in this study. These variables are being reported to provide answers to the four research questions:

1. Are certified staff members' perceptions of principal leadership significantly different according to the EVAAS growth status and school performance grade in low-performing elementary schools in North Carolina?
2. Are certified staff members' perceptions of teacher leadership significantly different according to the EVAAS growth status and school performance grade in low-performing elementary schools in North Carolina?
3. Are certified staff members' perceptions of their students' discipline significantly different according to the EVAAS growth status and school performance grade in low-performing elementary schools in North Carolina?
4. Are certified staff members' perceptions of teacher retention significantly different according to the EVAAS growth status and school performance grade in low-performing elementary schools in North Carolina?

In addition, information and test results on the descriptive statistics in the areas of school growth status, school performance grades, dependent variables, and independent and dependent variables combined will be examined. The correlation of variables, Box's Test of Equality of Covariance Matrices, Multivariate Tests with Wilks' Lambda, and the Test Between Subject Effects will also be measured. The frequency data will be examined to find the hypothesis. A summary will be provided after this chapter.

Descriptive Analysis

Sample

The sample for this study was sourced from two public data repositories: the 2022 results of the NCTWCS, available at www.nctwcs.org, and the 2021-22 Low-Performing Schools List dataset, which is located on the NCDPI website. The NCTWCS is conducted biannually for certified staff members in public schools in North Carolina. NCDPI reports the list of low-performing schools each year.

The unit of analysis is the school. This study consists of 293 elementary schools from 77 school districts. A total of 11,018 participants from 293 low-performing elementary schools completed the NCTWCS. This study did not select elementary schools randomly. Pre-kindergarten-fifth grade elementary schools with a response rate of 40% and at least five participants were used in the study.

Participating School Characteristics

Based on the frequency data of the independent variables, school growth status, and school performance grade, there are 293 valid elementary schools. Of these, 199 schools met growth, and 94 did not. Of the schools, 210 (71.7%) received a school performance grade of "D," while 83 (28.3%) were graded "F." Table 3 presents detailed school-level descriptive statistics for school growth status. In contrast, Table 4 provides descriptive statistics for school performance grades.

Table 3*Descriptive Statistics of School Growth Status*

Variable	Frequency	Percent	Valid Percent	Cumulative Percent
Not Met	94	32.0	32.0	32.0
Met	199	68.0	68.0	100.0
Total	293	100.0	100.0	

Table 4*Descriptive Statistics of School Performance Grades*

Variable	Frequency	Percent	Valid Percent	Cumulative Percent
F	83	28.3	28.3	28.3
D	210	71.7	71.7	100.0
Total	293	100.0	100.0	

Descriptive statistics are included for all variables. Table 5 presents basic statistics, including the mean, standard deviation, and the number of schools. The mean scores indicate the average scoring for each variable, aggregated at the school level. Additionally, the standard deviation at the school level offers insights into the distribution of the variables. Among these variables, the standard deviations for principal leadership (PL) and student discipline (SD) were much greater than those for teacher leadership (TL) and teacher retention (TR). This information denotes that people have a wider range of ratings in PL and SD. The results of standard deviations showcased different levels of variability across all four independent variables. The largest standard deviation is in the area of SD, which was 55.98, with a mean of 78.50. PL had a

standard deviation of 54.59, with a mean of 83.60. Thus, their perceptions of those two variables are vastly different. In the area of TR, there was a standard deviation of 13.40, with a mean of 81.40, and TL had the lowest standard deviation of 12.34, with a mean of 78.29. In the areas of TR and TL, the perceptions of the certified staff's level of agreement were higher. IBM SPSS Statistics 28.0 was used to complete the descriptive analyses.

Table 5

Descriptive Statistics of Dependent Variables

Variable	Mean	SD	N
PL	83.60	54.59	293
TL	78.29	12.34	293
SD	78.50	55.98	293
TR	81.40	13.40	293

Reliability

The reliability of this study is vital as it is the foundation of how well the study is designed. “Three attributes contribute to reliability: homogeneity, stability, and equivalence” (Heale & Twycross, 2015, p. 66). “Homogeneity refers to how well all the items on a scale measure one construct, stability is the consistency of results when using an instrument with repeated testing, and equivalence refers to the consistency among responses of multiple users of an instrument or alternate forms of an instrument” (Heale & Twycross, 2015, pp. 66-67). This survey has been widely used across NC since 2002, has undergone multiple reliability tests, and is validated.

According to documentation on the website, the survey is “a statistically valid and reliable instrument to assess whether educators have working conditions in their school that

support effective teaching” (North Carolina Teacher Working Conditions Survey, 2022). The survey was analyzed, reevaluated, redesigned, and administered online for the first time in 2006 to certified staff members in public schools in North Carolina (Hirsch et al., 2006). The perception data gathered were quantified using a five-point Likert scale. The New Teacher Center (2012) reassessed the content validity and reliability of the NCTWCS in 2012, focusing on teaching, leading, and learning conditions. “According to the New Teacher Center (2012), through presentations and technical assistance to thousands of educators in North Carolina and across the nation, feedback on the wording of the questions and other areas to assess has been gathered and utilized to improve the survey instrument” (p. 2). “The construct validity results indicate that the survey sections are well suited in North Carolina to reflect the focus area of each major concept generated through the factor analyses” (New Teacher Center, 2012, p. 3). The New Teacher Center (2012) study found a strong link between positive teacher working conditions, as measured by the NCTWCS, student learning, and teacher retention. This connection was supported by validity and reliability analyses using student achievement and teacher retention data (New Teacher Center, 2012). The independent variables used in the study are school performance grades and the EVAAS growth measures. The New Teacher Center (2012) found strong and significant connections between success in school performance grades and the EVAAS growth measures, as confirmed by the predictive validity of the survey.

Reliability analyses were performed to evaluate the different aspects of teaching working conditions, and the subscales within the survey were assessed across the eight survey constructs (New Teacher Center, 2012). “Cronbach's alphas were calculated to assess the internal consistency reliability of the eight key constructs” (Hemphill, 2014, p. 54). “All eight constructs were reliable, with alphas ranging from 0.863 to 0.950” (Hemphill, 2014, p. 54). Cronbach's

alpha is one of the most commonly used measures of internal consistency for a group of items in a survey or instrument within the fields of social and organizational sciences (Bonett & Wright, 2015). The internal consistency of the NCTWCS evaluates how reliably certified staff members respond to the items on the designated scale (New Teacher Center, 2012). Internal consistency confirmed that the survey would produce similar results when given to comparable groups (New Teacher Center, 2012). It was determined that the NCTWCS is a reliable and valid measure based on the psychometrics analyses (Abury, 2010).

Correlations

Pearson correlations of the dependent variables (principal leadership, teacher leadership, student discipline, and teacher retention) were conducted with detailed results provided in Table 6. The correlation analysis was designed to determine whether the four dependent variables were correlated. Results show that there are correlations between the dependent variables. Statistically significant correlations were detected between principal leadership and teacher leadership with a correlation of .29, as well as principal leadership and teacher retention with a correlation of .24. There were also correlations between teacher leadership and student discipline with a correlation of .14, as well as teacher leadership and teacher retention with a correlation of .79. Finally, there is a correlation between student discipline and teacher retention with a correlation of .17. Based on this multitude of these correlations, it was appropriate to conduct a 2 x 2 factorial MANOVA.

Table 6*Pearson Two-Tailed Correlations of Variables*

	PL	TL	SD	TR
PL	1.00	.29**	.05	.24**
TL		1.00	.14*	.79**
SD			1.00	.17**
TR				1.00

** Correlation is significant at the 0.01 level (2-tailed).

* Correlation is significant at the 0.05 level (2-tailed).

MANOVA Results

The two-way MANOVA is an analytical technique that extends the principles of the two-way ANOVA with multiple dependent variables (Amstat Consulting, 2024). Additionally, MANOVA is useful in determining a more comprehensive view of the interactions between two independent variables and multiple dependent variables, allowing for a better understanding of complex relationships (Amstat Consulting, 2024). The 2 x 2 factorial MANOVA for this study measures the school performance grade (D or F) and the school growth status (met and not met) from each school on certified staff perspectives of principal leadership, teacher leadership, student discipline, and teacher retention.

Alternative Hypothesis 1

Certified staff members' perceptions of principal leadership are significantly different according to the EVAAS growth status and school performance grade in low-performing elementary schools in North Carolina.

Alternative Hypothesis 2

Certified staff members' perceptions of teacher leadership are significantly different according to the EVAAS growth status and school performance grade in low-performing elementary schools in North Carolina.

Alternative Hypothesis 3

Certified staff members' perceptions of their students' discipline are significantly different according to the EVAAS growth status and school performance grade in low-performing elementary schools in North Carolina.

Alternative Hypothesis 4

Certified staff members' perceptions of teacher retention are significantly different according to the EVAAS growth status and school performance grade in low-performing elementary schools in North Carolina.

Overall Results

Based on the descriptive statistics of the independent and dependent variables combined in Table 7, in the area of principal leadership, schools with a school performance grade (SPG) of a D have a mean of 81.99, as compared to schools with an SPG of an F, who have a mean of 87.68. When comparing schools that met growth, schools with an SPG of a D have a mean of 81.00, compared to schools with an SPG of an F, which have a mean of 97.52. When comparing schools that did not meet growth, schools with an SPG of a D have a mean of 84.58, compared to schools with an SPG of an F, which have a mean of 74.83. Schools with an SPG of an F have a higher level of agreement on principal leadership than schools with an SPG of a D.

In teacher leadership, schools with an SPG of a D have a mean of 80.08 compared with schools with an SPG of an F, with a mean of 73.77. Schools that met growth with an SPG of a D

had a mean of 78.78 compared to schools with an SPG of an F with a mean of 74.87. Schools that did not meet growth with an SPG of a D have a mean of 83.48 compared to schools with an SPG of an F with a mean of 72.33. Schools with an SPG of a D have a higher agreement level of teacher leadership than schools with an SPG of an F.

When examining student discipline, schools with an SPG of a D had a mean of 77.21 compared to schools with an SPG of an F with a mean of 81.74. Schools that met growth with an SPG of a D had a mean of 76.20 compared to schools with an SPG of F, with a mean of 72.21. Schools that did not meet growth with an SPG of a D had a mean of 79.86 compared with an SPG of F, which had a mean of 94.19. Schools with an SPG of F had a higher level of agreement than schools with an SPG of D in student discipline.

In teacher retention, schools with an SPG of a D had a mean of 83.75 compared to schools with an SPG of an F, with a mean of 75.45. Schools that met growth with an SPG grade of a D had a mean of 82.88 compared to schools with an SPG of an F with a mean of 77.49. Schools that did not meet growth with an SPG of a D have a mean of 86.02 compared to schools with an SPG of an F with a mean of 72.78. Schools with an SPG of a D have a higher level of agreement than schools with an SPG of an F.

Overall, in the areas of principal leadership and student discipline, schools with an SPG of an F had a higher level of agreement than schools with an SPG of a D. However, in the areas of teacher leadership and teacher retention, schools with an SPG of D had a higher level of agreement than schools with an SPG of an F. Table 7 provides the details of the descriptive statistics.

Table 7*Descriptive Statistics of Independent and Dependent Variables Combined*

	School Growth Status	School Performance Grade	Mean	Standard Deviation	Number
PL	Not Met	F	74.83	12.22	36
		D	84.58	9.00	58
		Total	80.85	11.34	94
	Met	F	97.52	134.35	47
		D	81.00	10.60	152
		Total	84.90	65.79	199
	Total	F	87.68	101.58	83
		D	81.99	10.29	210
		Total	83.60	54.59	293
TL	Not Met	F	72.33	12.95	36
		D	83.48	8.56	58
		Total	79.21	11.73	94
	Met	F	74.87	13.54	47
		D	78.78	12.23	152
		Total	77.86	12.63	199
	Total	F	73.77	13.27	83
		D	80.08	11.51	210
		Total	78.29	12.34	293
SD	Not Met	F	94.19	157.01	36
		D	79.86	11.48	58
		Total	85.35	96.99	94
	Met	F	72.21	12.14	47
		D	76.20	13.22	152
		Total	75.26	13.05	199
	Total	F	81.74	103.56	83
		D	77.21	12.84	210
		Total	78.50	55.98	293
TR	Not Met	F	72.78	18.40	36
		D	86.02	8.91	58
		Total	80.95	14.76	94
	Met	F	77.49	14.54	47
		D	82.88	11.91	152
		Total	81.61	12.75	199
	Total	F	75.45	16.39	83
		D	83.75	11.23	210
		Total	81.40	13.40	293

The Box's Test of Equality Covariance Matrices was also conducted. The p-value for this test must be greater than 0.05 to indicate no statistically significant differences in variance across groups. The p-value was close to 0.00. Based on this test, it was determined that the observed covariance matrices of the dependent variables were not equal across the groups. Below are the results of the Box's Test of Equality Covariance Matrices.

Table 8

Box's Test of Equality of Covariance Matrices

Box's M	1986.190
F	63.930
df1	30
df2	67039.774
Sig.	.000

Since the equal variance assumption had not been met, further attention was warranted to check statistics using the Wilks' Lambda test. The Wilks' Lambda results are presented in Table 9. "The Wilks Lambda is a statistical test used in MANOVA to test whether there are differences between the means of identified subjects on a combination of dependent variables" (Tan et al., 2021, p. 273). Additionally, it is a statistical measure used in multivariate analysis to assess the significance of a group of predictor variables in explaining a set of outcome variables (Bartlett et al., 2008). Suppose the independent variable accounts for most of the variance; in that case, it suggests that the variable's impact is used for grouping and that the various groups have distinct average/mean values (Bartlett et al., 2008).

Wilk's Lambda statistics were provided for school growth status, school performance grade, and their interaction to determine whether or not the group means of the dependent variables differ significantly across the levels of the independent variables on the combination of

the dependent variables. No statistically significant differences existed between at least one dependent variable under school growth. Statistically significant differences did exist, with at least one variable in the area of school performance grade with a p-value of <0.001. Furthermore, among school growth status and school performance grade, the p-value of 0.044 indicates that for the interaction, there is at least one dependent variable with a statistically significant group mean difference among the four dependent variables. Below are the results:

Table 9

Multivariate Tests ~ Wilks' Lambda

Effect	Value	F	Hypothesis df	Error df	Sig.	Partial Eta Squared
School Growth Status	.973	2.00 ^b	4.000	286.000	.095	.027
School Performance Grade	.888	9.054 ^b	4.000	286.000	<.001	.112
School Growth Status & School Performance Grade	.966	2.487 ^b	4.000	286.000	.044	.034

The between-subject statistics determined whether or not there are statistically significant mean differences among the group. The school growth status is one factor, with the measures of met or not met. The school performance grade is another factor, with two groups of a “D” or “F”. The interaction of school growth status and school performance grade includes all four dependent variables. In between these two groups, all four dependent variables did not show any statistically significant mean differences.

Alternative hypothesis 1 posits that certified staff members' perceptions of principal leadership differ significantly based on EVAAS growth status, school performance grade, and their interaction in low-performing elementary schools in North Carolina. According to Table 10,

the three corresponding p-values were 0.195, 0.645, and 0.075; none of the p-values were smaller than 0.05. Thus, I reject the first alternative hypothesis and conclude that there were no significant differences among the different levels of both the independent variables and there interaction.

Alternative hypothesis 2 suggests that certified staff members' perceptions of teacher leadership vary significantly based on EVAAS growth status, school performance grade, and there interactions in low-performing elementary schools in North Carolina. Based on the results, I accept the second alternative hypothesis as statistically significant differences exist. More specifically, the two groups in school performance grades demonstrated statistically significant mean group differences in their perceptions of teacher leadership; according to the Tests of Between Subjects Effects Table, there is a significance value of $<.001$. When examining the interaction between the school performance grade (SPG) and the school growth status (SGS), there are statistically significant difference between SPG/SGS and teacher leadership with a significance value of .025; there is a significant effect in teacher leadership.

The third alternative hypothesis predicts certified staff members' perceptions of their students' discipline are significantly different according to the EVAAS growth status and school performance grade in low-performing elementary schools in North Carolina. According to the Tests of Between Subjects Effects table, the three corresponding p-values were 0.091, 0.494, and 0.226; none of the p-values were smaller than 0.05. Based on the results, I reject the third alternative hypothesis as there are no significant differences.

Alternative hypothesis 4 proposes that certified staff members' perceptions of teacher retention differ significantly based on EVAAS growth status and school performance grade in low-performing elementary schools in North Carolina. Based on the results, I accept the fourth

alternative hypothesis as statistically significant differences exist. Regarding teacher retention, according to the Tests of Between Subjects Effects Table, the two groups in school performance grades demonstrated statistically significant mean group differences in their perceptions of teacher retention with a significance value of $<.001$. When examining the interaction between the school performance grade (SPG) and the school growth status (SGS), there were also statistically significant differences between SPG/SGS and teacher retention with a significance value of .024.

Table 10*Tests of Between Subjects Effects*

Source	Dependent Variable	Type III Sum of Squares	Df	Mean Square	F	Sig.	Partial Eta Squared
School Growth Status	PL	5010.184	1	5010.184	1.689	.195	.006
	TL	64.170	1	64.170	.452	.502	.002
	SD	9012.977	1	9012.977	2.883	.091	.010
	TR	34.079	1	34.079	.207	.649	.001
School Performance Grade	PL	629.128	1	629.128	.212	.645	.001
	TL	3110.191	1	3110.191	21.886	<.001	.070
	SD	1465.635	1	1465.635	.469	.494	.002
	TR	4763.512	1	4763.512	28.984	<.001	.091
SGS & SPG	PL	9472.516	1	9472.516	3.194	.075	.011
	TL	718.329	1	718.329	5.055	.025	.017
	SD	4604.981	1	4604.981	1.473	.226	.005
	TR	845.002	1	845.002	5.142	.024	.017

Summary

Chapter 4 presented the results from the descriptive statistics, correlation among all independent variables, and MANOVA analysis employed to address the research questions. The

findings offer insights into the perceptions of certified staff members in low-performing schools in North Carolina regarding principal leadership, teacher leadership, student discipline, and teacher retention. This chapter also provides details about instrumentation, participants, reliability, and validity. Chapter 5 will focus on the interpretations and implications of these findings.

CHAPTER 5: DISCUSSION

Overview of the Study

This quantitative study explored whether two school-level characteristics, namely, schools' EVAAS growth status and school performance grade, impact certified staff members' confidence levels regarding principal leadership, teacher leadership, student discipline, and teacher retention in low-performing elementary schools in North Carolina. The study also aimed to answer the overarching research question: whether there are statistically significant differences in school staff's perceptions of principal leadership, teacher leadership, student discipline, and teacher retention based on their school's EVAAS growth measure and performance grade among low-performing elementary schools. The final chapter will discuss the findings of the statistical analysis conducted in chapter four, and what practical implications the statistical results have for the school leaders and policymakers. In addition to the discussions and conclusions, suggestions for future research will also be provided.

The following research questions guided this quantitative study:

1. Are certified staff members' perceptions of principal leadership significantly different according to the EVAAS growth status and school performance grade in low-performing elementary schools in North Carolina?
2. Are certified staff members' perceptions of teacher leadership significantly different according to the EVAAS growth status and school performance grade in low-performing elementary schools in North Carolina?
3. Are certified staff members' perceptions of their students' discipline significantly different according to the EVAAS growth status and school performance grade in low-performing elementary schools in North Carolina?

4. Are certified staff members' perceptions of teacher retention significantly different according to the EVAAS growth status and school performance grade in low-performing elementary schools in North Carolina?

A quantitative approach allowed me to investigate public data while comparing multiple variables, which helped control for biases. The first data source was the 2022 NCTWCS, in which the certified staff members' responses to the survey items were converted into school-level statistics. The second source was the 2022 low-performing schools list provided by NCDPI. A 2 x 2 factorial MANOVA was used because the dependent variables (principal leadership, teacher leadership, student discipline, and teacher retention) were all inter-correlated. These four variables were all from the subscales of the NCTWCS, which measures school climate (North Carolina Teacher Working Conditions Survey, 2022). Additionally, the 2 x 2 factorial MANOVA examined the EVAAS growth measure (met or not met) and the school performance grade from each school (D or F) on certified staff perspectives as the dependent variables. Each area's ratings were integrated into one value for each school.

Discussion of Findings

The results of this study confirmed that certified staff members' perceptions of teacher leadership and teacher retention differ statistically significantly based on the school's EVAAS growth measure and performance grade in low-performing elementary schools in North Carolina. However, the research findings did not match previous studies regarding certified staff members' perceptions of principal leadership and student discipline, as no statistically significant differences were observed. In other words, certified staff members' perceptions of teacher leadership and retention are vital to student achievement in low-performing schools. This underscores the importance of cultivating and supporting teacher leadership and retention to

improve overall school performance. However, it is interesting to note that the variance in certified staff members' perceptions of principal leadership and student discipline yielded different results, which suggests that there may be insights gained through alternative research methods.

Research Question/Alternative Hypothesis 1 Discussion

The first alternative hypothesis in this study stated that certified staff members' perceptions of principal leadership are significantly different according to the EVAAS growth status and school performance grade in low-performing elementary schools in North Carolina. The initial analysis in this study aimed to assess whether certified staff members' perceptions of principal leadership differed significantly based on EVAAS growth status, school performance grade, and their interaction in low-performing elementary schools in North Carolina. I examined the descriptive statistics, which included basic measures such as the standard deviation, mean, and number of schools. For principal leadership, the standard deviation was 54.59, and the mean was 83.60, suggesting that participants provided a broad range of ratings in this area.

According to the descriptive statistics for the combined Independent and Dependent Variables, schools with a school performance grade (SPG) of D had a lower mean in principal leadership than those with an SPG of F. When comparing schools that met growth, schools with an SPG of a D also had a lower mean than schools with an SPG of an F. When comparing schools that did not meet growth, schools with an SPG of a D had a higher mean than schools with an SPG of an F. Based on these means, in the area of principal leadership, the trend suggests that schools with an SPG of an F had higher perceptions of principal leadership than schools with an SPG of a D, with a mean difference of 5.69 percentage points.

Based on North Carolina General Statute 115C-105.39, within 30 days of a school being identified as low-performing, the superintendent must take one of the following actions to the school's principals: (1) recommend that the principal remain at the school, (2) recommend the principal remain at the school but be placed on an improvement plan, (3) recommend the principal be moved to another school, or (4) dismiss or demote the principal (Dismissal or removal of personnel; appointment of interim superintendent, 2015). Additionally, the principal may remain in the position without a plan for improvement if the principal has been at the school for less than two years (Dismissal or removal of personnel; appointment of interim superintendent, 2015). If the principal has been at the school for two years or more, the principal would have needed to meet growth based on EVAAS and improved student achievement scores for the prior school year (Dismissal or removal of personnel; appointment of interim superintendent, 2015). There are also guidelines regarding transferring a principal after they have failed at a low-performing school. The principal cannot be moved into another school unless (1) it is a school classification where the principal previously demonstrated 2 years of success, (2) the district puts supports in place to evaluate and remediate for at least one year following the transfer to ensure the principal does not impede student achievement, (3) the parents at the new school are notified of the principal transfer (Dismissal or removal of personnel; appointment of interim superintendent, 2015). Furthermore, the principal cannot be transferred to another low-performing school in the district.

According to North Carolina general statutes, superintendents have a mandated responsibility to provide increased support to low-performing schools compared to their higher-performing counterparts. This legal expectation emphasizes the importance of dedicated resources and leadership in addressing the unique challenges faced by these schools. In my

professional experience, principals reassigned to low-performing schools within the same school district often exhibit a strong capacity to effectively enhance student achievement. Moreover, principals recruited from outside the district to lead low-performing schools frequently come with a proven track record of success from previous low-performing schools they have led. Although the results of my study diverged from those of earlier research, the implications of my findings resonate closely with the objectives outlined in the general statute. This statute emphasizes the importance of having a strong principal at the helm of low-performing schools, underscoring the critical role leadership plays in fostering improvement and success within these educational environments.

Pearson correlations of the dependent variables (principal leadership, teacher leadership, student discipline, and teacher retention) were also conducted. The results indicated that there were correlations among the dependent variables. Statistically significant correlations were detected between principal leadership and teacher leadership and between principal leadership and teacher retention. According to the tests of between-subject effects, no statistically significant differences existed. The first hypothesis was rejected based on the MANOVA results, which indicated no significant differences.

This outcome differed from previous research. For instance, Ladd (2011) found that principal leadership influences staff's perceptions of working conditions. Additionally, Sanchez et al. (2022) explored the relationships between teachers' perceptions of principal leadership and school climate in high schools. Their findings indicated that when teachers viewed principal leadership as effective, they also perceived a more positive school climate, regardless of whether the schools were high-performing or low-performing (Sanchez et al., 2022). Notably, the study revealed that in schools with high rates of free and reduced lunch—designated as Title I

schools—teachers’ perceptions of principal leadership were more favorable in environments with a positive climate (Sanchez et al., 2022).

Research Question/Alternative Hypothesis 2 Discussion

The second alternative hypothesis of this study stated that certified staff members' perceptions of teacher leadership vary significantly based on EVAAS growth status and school performance grades in low-performing elementary schools in North Carolina. According to the descriptive statistics, teacher leadership had the lowest standard deviation of 12.34, indicating the percentages are more concentrated and the range of difference is smaller. In the area of teacher leadership, schools with an SPG of a D had a higher mean as compared to schools with an SPG of an F. Schools that met and did not meet growth with an SPG of a D also had a higher mean than schools with an SPG of an F. Schools with an SPG of a D had higher perceptions of teacher leadership than schools with a SPG of an F, with a mean difference of 6.31 percentage points.

The Pearson correlations among the dependent variables revealed statistically significant relationships between principal leadership and teacher leadership, teacher leadership and student discipline, and teacher leadership and teacher retention. Based on the tests of between-subject effects, the two groups in school performance grades demonstrated statistically significant mean group differences in their perceptions of teacher leadership with a significant value of $<.001$. Furthermore, when examining the interaction between the SPG and SGS, there are statistically significant differences between the SPG/SGS and teacher leadership, with a significance value of $.025$; there is a significant interaction effect in teacher leadership. Based on these findings, I accepted the second hypothesis.

The results of this question/alternative hypothesis aligned with previous research. Teachers thrive on having adequate planning and collaboration time with teacher leaders. Additionally, teachers like the opportunity to have expanded leadership roles, such as providing professional development for others within the school (Ladd, 2011). Also, Angelle and DeHart (2011) proposed that enhancing teacher leadership can lead to positive changes within schools and improve student achievement. Teacher leaders have formal and informal roles and often can encourage colleagues to improve, which entails improved working conditions. Providing support as a teacher leader comes in many forms, such as providing professional development, leading the professional learning community, assisting with lesson planning, modeling lessons, serving as the department chairperson, or on the school leadership team. Additionally, teacher leaders can support their colleagues non-evaluatively, providing ongoing support and creating a positive collaboration environment (Angelle & DeHart, 2011). According to the study by Angelle and DeHart (2011), elementary teachers had significantly higher perceptions regarding the sharing of expertise and the importance of teacher leaders.

Research Question/Alternative Hypothesis 3 Discussion

The third alternative hypothesis of this study stated that certified staff members' perceptions of student discipline vary significantly based on EVAAS growth status and school performance grades in low-performing elementary schools in North Carolina. According to the descriptive statistics, student discipline had the largest standard deviation of all four variables; therefore, the participants' perceptions of student discipline differed vastly. When examining student discipline, schools with an SPG of a D had a lower mean than schools with an SPG of an F. Schools that achieved growth with an SPG of D had a higher mean compared to those that achieved growth with an SPG of F. Conversely, schools that did not meet growth with an SPG of

D had a significantly lower mean than those with an SPG of F that also did not meet growth.

Based on this trend, schools with an SPG of an F had a mean difference of 4.53 as compared to schools with an SPG of a D.

As stated earlier, it is the superintendent's responsibility to ensure that a highly effective principal is appointed to lead each low-performing school within the district. This involves identifying qualified candidates who possess the skills and vision necessary to drive improvement and foster a positive learning environment for students. Based on my professional experience, there tends to be a higher frequency of principal changes at schools that have received an F school performance grade, especially those that have not met growth expectations for several years in a row. This instability can disrupt the continuity needed for long-term improvement efforts.

Principals typically employ a variety of strategies to bolster student discipline and promote a positive school culture. This often begins with the creation of comprehensive processes and procedures designed to encourage desirable behavior among students. These initiatives may include establishing clear behavioral expectations, regular communication with students and parents about these expectations, and implementing targeted interventions for those who struggle to comply. Many principals opt to enforce stricter consequences for infractions to maintain order and encourage a conducive learning environment. This can create an impression that student conduct is meticulously monitored and managed. While these measures are intended to curb disruptions, they may also foster a perception among staff that there is a strong emphasis on discipline, thus aligning with the data of this study.

The Pearson correlations indicated relationships between teacher leadership and student discipline and between student discipline and teacher retention. The tests of between-subject

effects showed no significant differences between school growth status and student discipline. Likewise, no significant differences were found between school performance grades and student discipline. Based on these results, I rejected the third alternative hypothesis due to the absence of significant differences.

Unexpectedly, the results of this question/alternative hypothesis were inconsistent with previous research. Research indicates that 97% of teachers expressed that positive student behavior is necessary for a school to be successful (Conly et al., 2014). Additionally, 80% of teachers noted that they could be effective if they did not address students' inappropriate behavior, and 40% indicated that they spent more time managing behavior than providing instruction (Conly et al., 2014). Alsubaie (2015) reported that challenges related to discipline can impede students' learning in an elementary school environment. Noltemeyer et al. (2015) noted that teachers have left the profession because of disruptive student behavior, significantly affecting student achievement. Research indicated that teachers cited student discipline as a primary factor contributing to poor working conditions (Shelton, 2018). Research by the National Center for Education Statistics (2012) and Whitener and Graber (2011) revealed that student discipline and classroom management challenges greatly influence teacher attrition rates. These factors are key reasons many teachers leave the profession within their first three years. (NCES, 2012; Whitener & Graber, 2011).

Research Question/Alternative Hypothesis 4 Discussion

The final alternative hypothesis of this study stated that certified staff members' perceptions of teacher retention vary significantly based on EVAAS growth status and school performance grade in low-performing elementary schools in North Carolina. Based on the descriptive statistics, the standard deviation in the area of teacher retention was relatively low,

which indicated that the perceptions of the certified staff's level of agreement were high. In the area of teacher retention, schools with an SPG of a D had a higher mean than schools with an SPG of an F. Schools that met or did not meet growth with an SPG grade of a D also had a higher mean than schools with an SPG of an F that met or did not meet growth. Schools with an SPG of D had higher perceptions of teacher retention than schools with an SPG of F, with an 8.30 percentage point difference. Pearson correlations reveal statistically significant relationships between principal leadership and teacher retention. Additionally, there are correlations between teacher leadership and teacher retention and student discipline and teacher retention.

Based on the tests of between-subjects effects, the two groups in school performance grades demonstrated statistically significant mean group differences in their perceptions of teacher retention with a significance value of $<.001$. Additionally, when examining the interaction between school performance grades and school growth status, there are statistically significant differences between the SPG/SGS and teacher retention, with a significance value of $.024$; there is a significant interaction effect in teacher retention. Based on these findings, I accepted the fourth hypothesis, as significant differences in teacher retention were observed. These results were consistent with previous research.

Aubry (2010) examined the impact of favorable teacher working conditions on educational outcomes. Utilizing data collected from the National Center for Teaching Workforce Conditions Survey (NCTWCS), her research revealed a compelling correlation between these positive conditions and both student achievement and teacher retention rates (Aubry, 2010). Teaching presents a variety of challenges, particularly in schools situated in high-poverty areas. In such contexts, turnover rates can be high, especially among educators who are just beginning their careers (Rosenberg & Anderson, 2021). This trend underscores the pressing need for school

districts to recruit and retain high-quality teachers, particularly in schools that struggle with performance and are placed in demanding educational roles. In addition, a significant proportion of new teachers choose to leave the profession within the first five years of their teaching careers (Abury, 2010). Shelton (2018) highlights this concern, which impacts individual schools and has broader implications for student success. Schools that cultivate positive teaching conditions tend to experience significantly lower overall teacher turnover rates, including a decrease in the percentage of teachers who transfer to other institutions. These observations resonate with the patterns I have identified in my research, reinforcing the critical importance of fostering a nurturing and resourceful atmosphere for teachers to thrive personally and professionally. Such environments benefit educators and ultimately improve student learning outcomes, creating a more stable and effective school.

Implications

The findings from my research will help fill the gap in quantitative data regarding certified staff members' perceptions in low-performing elementary schools in North Carolina. No other studies specifically aimed to examine varying levels of low-performing schools. Existing research tends to compare teachers' perceptions between low-performing and high-performing schools. These results will benefit the Office of School Improvement at the NCDPI, boards of education, district and school administrators, teacher leaders, and employees at low-performing elementary schools. This data can provide insight into creating professional development, guiding school improvement planning, creating teacher retention programs, and developing effective teacher leadership models. Interestingly, my study found that certified staff members' perceptions of principal leadership and student discipline did not influence EVAAS or the school's performance grade.

This finding does not mean principal leadership does not matter in low-performing schools. Other research has identified significant connections between these factors and student achievement. For example, Wu & Shen (2022), Garland (2018), and Finnigan, K. S. (2011) all discuss the influence of principal leadership on student achievement. Based on Finnigan (2011), principal leadership is vital to turning around low-performing schools, so much so that it is suggested that districts develop policies to hire principals with a proven track record of improving student achievement. Garland (2018) discovered a positive correlation between principal leadership and student achievement in low-performing schools, especially in mathematics. Wu & Shen (2022) performed a multivariate random-effects meta-analysis that revealed a statistically significant positive relationship between principal leadership and student achievement. There may not be enough variability between the categories of low-performing schools in this study to reveal any statistically significant differences.

Additionally, even though no statistically significant differences were found across different groups in terms of student discipline, the implications of this study do not mean that student discipline does not matter in low-performing schools. While serving as principal for over a decade, teachers constantly expressed the importance of maintaining student discipline by demonstrating effective behavioral expectations. According to Leithwood and Sun (2018), using the majority of instructional time in the classroom, with limited disciplinary issues, provides students with opportunities to achieve their academic goals. Within the school climate, a disciplinary climate exists. Disciplinary climate encompasses factors such as student behavior issues, classroom disruptions, attendance, counseling offered to students, behavioral rules, racial or cultural conflicts at the school, consequences for misbehavior, and teacher-student relationships (Ma & Williams, 2004). Ma and Klinger (2000) identified disciplinary climate as

the most crucial factor influencing academic achievement. In a study by Ma (2003), disciplinary climate emerged as the sole school-level variable that significantly impacted academic performance. However, teachers' perceptions of student discipline did not have the same impact in this study. These findings might have occurred because I only examined schools with a school performance grade of a D or F. Future research on how different school performance grade levels impact school staff's perception of student disciplinary issues is highly encouraged.

As the findings indicated the importance of teacher leadership, school districts should continue focusing on improving teacher leadership, particularly in low-performing schools. One model that is being used in schools across the country is Opportunity Culture. Opportunity Culture provides innovative staffing models that help districts and schools restructure to extend the reach of excellent teaching through teacher-leaders (Public Impact LLC, 2024). One of the teacher-leader models that is used through Opportunity Culture is the multi-classroom leader, who leads a small team of teachers by providing support and on-demand coaching through facilitating professional learning communities, analyzing student data, developing common assessments, modeling instruction, and assisting with the development of lesson plans (Public Impact LLC, 2024). Another teacher-leader model through Opportunity Culture is the extended-reach teacher. In this position, the teacher serves more students and provides full-time supervision to a reach associate who is a classified staff member on track to become a certified teacher (Public Impact LLC, 2024). Based on data from Public Impact LLC (2024), on average, students learn at the rate of one and a half years of instruction each year. Additionally, 97% of teachers want these roles to continue in their schools, and 96% agree that teacher-leader support translates into improved instructional practice (Public Impact LLC, 2024). This model displays

teacher leadership, improves student achievement, and promotes teacher retention by supporting beginning and future teachers.

This study also has implications for beginning and residency-licensed teachers in low-performing schools. There has been a significant increase in residency-licensed teachers in North Carolina. A residency-license teacher holds a four-year degree but does not have a degree in education or training in teaching methods. In 2021, there were 1,942 residency-licensed teachers in NC compared to 5,242 residency-licensed teachers in 2024 (Hoke, 2024). Based on the demands placed on principals, having teacher leaders who provide instructional support to these teachers is key to the success of low-performing schools.

Providing support for beginning and residency-licensed teachers must be a priority in low-performing schools, as these teachers are exponentially higher in low-performing schools (Hoke, 2024). According to Myers (2013), being provided with a coach, particularly one not affiliated with the district, is beneficial. This coach could provide the beginning teacher with guidance and feedback, which would not be punitive to their teaching position (Myers, 2013). Based on the study's results, a positive work environment impacted beginning teachers in low-performing schools (Myers, 2013). Furthermore, Myers (2013) reported that the beginning teachers needed instructional support, including formal and informal walkthroughs with consistent feedback that was provided without a paper trail. The other two factors essential to the beginning teachers were ample daily planning time and the resources to do their jobs effectively (Myers, 2013). In essence, beginning teachers need a non-evaluative coach, an environment with high morale, consistent instructional feedback, planning time, and appropriate resources to succeed in a low-performing school (Myers, 2013).

To decrease the number of low-performing elementary schools, teacher retention is pivotable. Additionally, school districts must consider teacher retention programs for low-performing elementary schools. The teacher attrition rate in North Carolina for the 2022-2023 school year reached 11.5%, marking the highest level in more than 20 years (North Carolina Department of Public Instruction, 2023). Goldring et al. (2014), expressed discontent about the absence of enough qualified teachers to replace those leaving the profession. Redding (2018) notes that teaching positions in low-performing schools are frequently unfilled or occupied by novice or residency-licensed teachers, adversely affecting student achievement. As a result, low-performing schools need to implement strategies to retain teachers.

Though my research does not yield this result, Viano et al. (2021), suggest that enforcing student discipline and school safety is one of the primary ways to retain teachers in low-performing schools. Additionally, increasing salaries and providing opportunities for additional compensation was another important factor (Viano et al., 2021). The last factor Viano et al. (2021) identified for retaining teachers in low-performing schools was principal leadership.

The importance of principal leadership in retaining teachers was explored more in a study conducted by Kosches (2023). Based on results from Kosches (2023), principals are more likely to retain teachers when they are easily accessible and provide frequent communication, provide differentiated levels of support, with the understanding that one size does not fit all, and ensure resources are available to do their jobs. Further research suggests that schools with low teacher working conditions based on the NCTWCS had lower retention rates, which aligned with my research (Giles, 2018). Therefore, providing all teachers with a positive school climate is conducive to staff retention and student success.

Recommendations for Future Research

This research was designed to provide baseline data for low-performing elementary schools in North Carolina regarding certified staff members' perceptions of principal leadership, teacher leadership, student discipline, and teacher retention according to EVAAS and school performance grades. The quantitative analysis provides insight for state and local officials and low-performing school employees. The following are recommendations for future research:

1. Future researchers may consider expanding this research to all low-performing schools in North Carolina. During the 2021-2022 school year, there were 864 low-performing schools; this study only examined data from 293 elementary schools. This would include low-performing schools at all levels in North Carolina. It is also suggested that future research to investigate whether the school level would contribute to participants' perceptions on the chosen factors (e.g., principal leadership, teacher leadership, student discipline, and teacher retention).
2. Future studies should be performed in multiple states, in addition to low-performing schools in North Carolina, which will have a broader geographic impact. Future research can determine if staff perceptions of teacher leadership and retention would statistically significantly differ based on EVAAS growth and school performance grades in different geographic locations.
3. In this study, schools with at least five participants and a 40% and above response rate on the NCTWCS were included in the survey. Increasing the minimum response rate could be considered for future recommendations, which would increase the sample size.

4. A longitudinal study could also be considered for future research. Monitoring multiple years of data would be beneficial and provide a robust study. In addition, a comprehensive longitudinal study should be considered, examining multiple years before COVID-19 compared to multiple years after COVID-19. This research could determine if COVID-19 had an impact on teachers' perceptions.
5. Four areas were evaluated during this study, though the NCTWCS has 13 areas. Examining all 13 areas while comparing the school's EVAAS growth measure and performance grade in low-performing elementary schools should be considered for future research.
6. Qualitative research, or a mixed methods design, could also complement and further enhance this study by offering a detailed exploration of this study and an in-depth analysis of the lived experiences of staff in these low-performing schools regarding the same constructs I examined.
7. Future quantitative research that includes more categories of school performance grades should be considered. This study examined schools with school performance grades of D and F. Therefore, adding a category of C schools (which includes most schools in North Carolina) along with a category of A and B schools would provide a comparative analysis. This would also provide an analysis of low and high-performing schools in North Carolina.

Conclusion

This chapter discussed the findings of four research questions based on a 2x2 MANOVA analysis. The focus of this study was to determine certified staff members' perceptions of principal leadership, teacher leadership, student discipline, and teacher retention based on

schools' EVAAS growth data and performance grades. It is essential to gain further insights into how low-performing elementary schools can improve their performance. Before COVID-19, the number of low-performing schools was significantly lower. In the 2016-2017 school year, there were 505 low-performing schools; in 2017-2018, this number dropped to 479; and in 2018-2019, there were 488 (North Carolina Department of Public Instruction, 2024). However, following the pandemic, these numbers rose dramatically: in the 2021-2022 school year, there were 864 low-performing schools, followed by 804 in 2022-2023, and 736 in 2023-2024 (North Carolina Department of Public Instruction, 2024). While the total has decreased from 2022 to 2024, the current figures remain higher than those recorded before COVID-19.

Understanding certified staff members' perceptions of principal leadership, teacher leadership, student discipline, and teacher retention in low-performing elementary schools in North Carolina is vital to improving student achievement. The NCTWCS is a reliable instrument that provides results of approximately 100,000 public school-certified educators. This study determined that teacher leadership and retention perceptions were statistically significantly different when measuring the EVAAS growth and school performance grades. Finding high-quality teachers is challenging, and this issue is particularly pronounced when retaining teachers in high-poverty schools (Hui, 2015).

Previous studies have shown that principal leadership, teacher leadership, student discipline, and teacher retention all influence student achievement in low-performing schools (Bethel, 2020; Davis & Warner, 2015; Ethier, 2017; Jain et al., 2015). The findings of this study will contribute to the expanding body of research on low-performing schools, especially low-performing elementary schools. Although I was surprised by the results, the study produced significant outcomes. These unexpected findings can be utilized to tackle the challenges

affecting working conditions and student achievement in low-performing schools in North Carolina. While district leaders might focus on having strong principals and effective student discipline in these schools, the data highlights the essential role of teacher leadership and retention in impacting EVAAS scores and school performance grades. These results emphasize prioritizing teacher support and retention strategies in low-performing schools.

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APPENDIX A: PRINCIPAL LEADERSHIP SURVEY STATEMENTS

The following statements were used from the North Carolina Teacher Working Conditions Survey to measure principal leadership (North Carolina Teacher Working Conditions Survey, 2022):

- a. “There is an atmosphere of trust and mutual respect in this school.
- b. Teachers feel comfortable raising issues and concerns that are important to them.
- c. The school leadership consistently supports teachers.
- d. Teachers are held to high professional standards for delivering instruction.
- e. The school leadership facilitates using data to improve student learning.
- f. Teacher performance is assessed objectively.
- g. Teachers receive feedback that can help them improve teaching.
- h. The faculty and staff have a shared vision.
- i. The procedures for teacher evaluation are consistent.
- j. The school improvement team provides effective leadership at this school.
- k. The faculty are recognized for accomplishments.”

APPENDIX B: TEACHER LEADERSHIP SURVEY STATEMENTS

The following statements were used from the North Carolina Teacher Working Conditions Survey to measure teacher leadership (North Carolina Teacher Working Conditions Survey, 2022):

- a. “Teachers are recognized as educational experts.
- b. Teachers are trusted to make sound professional decisions about instruction.
- c. Teachers are relied upon to make decisions about educational issues.
- d. Teachers are encouraged to participate in school leadership roles.
- e. The faculty has an effective process for making group decisions to solve problems.
- f. In this school we take steps to solve problems.
- g. Teachers are effective leaders in this school.
- h. Teachers have an appropriate level of influence on decision making in this school.”

APPENDIX C: STUDENT DISCIPLINE SURVEY STATEMENTS

The following statements were used from the North Carolina Teacher Working Conditions Survey to measure student discipline (North Carolina Teacher Working Conditions Survey, 2022):

- a. “Students at this school understand expectations for their conduct.
- b. Students at this school follow rules of conduct.
- c. Policies and procedures about student conduct are clearly understood by the faculty.
- d. School administrators consistently enforce rules for student conduct.
- e. School administrators support teachers’ efforts to maintain discipline in the classroom.
- f. Teachers consistently enforce rules for student conduct.
- g. The faculty work in a school environment that is safe.”

APPENDIX D: TEACHER RETENTION SURVEY STATEMENT

The following statement was used from the North Carolina Teacher Working Conditions Survey to measure teacher retention (North Carolina Teacher Working Conditions Survey, 2022):

- a. “Overall, my school is a good place to work and learn.”

APPENDIX E: LIST OF SCHOOLS AND PARTICIPATION PERCENTAGES (NORTH CAROLINA TEACHER WORKING CONDITIONS SURVEY, 2022)

School Name	Percent of Participation
Grove Park Elementary	100%
Harvey R Newlin Elementary	100%
Haw River Elementary	95%
Hillcrest Elementary	100%
North Graham Elementary	84%
South Graham Elementary	100%
Hiddenite Elementary	100%
Wittenburg Elementary	100%
Newland Elementary	92%
Riverside Elementary	100%
West Bertie Elementary	100%
Colerain Elementary	100%
Bolivia Elementary	100%
Hall Fletcher Elementary	100%
Forest Hill Elementary	100%
Hildebran Elementary	100%
Hillcrest Elementary	100%
Mountain View Elementary	100%
Ray Childers Elementary	100%
Rocky River Elementary	100%
Winecoff Elementary	85%
W M Irvin Elementary	83%
Forest Park Elementary	100%

Davenport A+ School	100%
Dudley Shoals Elementary	100%
Gamewell Elementary	100%
Sawmills Elementary	100%
Whitnel Elementary	100%
Oakwood Elementary	100%
South Elementary	100%
Viewmont Elementary	100%
South Newton Elementary	100%
Siler City Elementary	100%
Andrews Elementary	100%
Township Three Elementary	100%
Washington Elementary	100%
Chadbourn Elementary	100%
Tabor City Elementary	100%
J T Barber Elementary	100%
Oaks Road Academy	100%
Roger Bell New Tech Academy	100%
Elizabeth M Cashwell Elementary	100%
Margaret Willis Elementary	100%
Montclair Elementary	100%
William H Owen Elementary	100%
Central Elementary	86%
Manteo Elementary School	92%
Brier Creek Elementary	100%

Southmont Elementary	100%
Denton Elementary	100%
Fair Grove Elementary	100%
Silver Valley Elementary	100%
Tyro Elementary	100%
Mocksville Elementary	100%
Hillandale Elementary	94%
Lakewood Elementary	100%
Parkwood Elementary	98%
C C Spaulding Elementary	100%
W G Pearson Elementary	87%
Y E Smith Elementary	100%
G W Bulluck Elementary	100%
Coker-Wimberly Elementary	100%
Princeville Elementary	100%
Stocks Elementary	100%
Ashley Academy	100%
Bolton Elementary	100%
Brunson Elementary	85%
Caleb's Creek Elementary	91%
Forest Park Elementary	92%
Griffith Elementary	71%
Hall-Woodward Elementary	76%
Kimberley Park Elementary	100%
Kimmel Farm Elementary	59%

Diggs-Latham Elementary	72%
Mineral Springs Elementary	90%
Moore Magnet Elementary	89%
North Hills Elementary	92%
Smith Farm Elementary	100%
South Fork Elementary	100%
Speas Elementary	90%
Union Cross Traditional Academy	91%
Walkertown Elementary	100%
Ward Elementary	100%
Bunn Elementary	100%
Carr Elementary	96%
Chapel Grove Elementary	100%
Costner Elementary	100%
Edward D Sadler Jr Elementary School	93%
Gardner Park Elementary	100%
Lingerfeldt Elementary	100%
Pleasant Ridge Elementary	95%
Robinson Elementary	100%
Sherwood Elementary	97%
H H Beam Elementary	94%
Tryon Elementary	90%
Woodhill Elementary	73%
Robbinsville Elementary	100%
C. G. Credle Elementary	100%

Creedmoor Elementary	100%
Mount Energy Elementary	100%
West Oxford Elementary	100%
Edwin A Alderman Elementary	100%
Allen Jay Elementary	100%
Bessemer Elementary	72%
Brightwood Elementary	92%
Monticello-Brown Summit Elem	100%
Ceasar Cone Elementary	90%
Fairview Elementary	100%
Waldo C Falkener Sr Elementary	100%
Cyrus P Frazier Elementary	100%
Gillespie Park Elementary	86%
Guilford Elementary	95%
Hunter Elementary	95%
Irving Park Elementary	97%
James Y Joyner Elementary	86%
Kirkman Park Elementary	100%
McLeansville Elementary	94%
Ronald E. McNair Elementary	100%
Montlieu Academy of Technology	100%
Northwood Elementary	100%
Oak Hill Elementary	90%
Oak View Elementary	97%
Parkview Village Elementary	100%

Clara J Peck Elementary	90%
Reedy Fork Elementary	100%
Rankin Elementary	100%
Sedalia Elementary	100%
Sedgefield Elementary	100%
Shadybrook Elementary	90%
George C Simkins Jr Elementary	98%
Triangle Lake Montessori Elem	97%
Union Hill Elementary	100%
Vandalia Elementary	100%
Washington Elementary	78%
Wiley Accel/Enrichment	100%
Everetts Elementary S.T.E.M. Academy	100%
Hollister Elementary Leadership Academy	100%
Pittman Elementary Leadership Academy	100%
Belmont Elementary School	100%
Boone Trail Elementary	100%
Coats Elementary	100%
Johnsonville Elementary	100%
Lillington-Shawtown Elementary	100%
Overhills Elementary	100%
Clear Creek Elementary	100%
Edneyville Elementary	100%
Sugarloaf Elementary	100%
Upward Elementary	100%

Riverview Elementary	100%
J W McLauchlin Elementary	100%
West Hoke Elementary	100%
Sandy Grove Elementary	100%
Cloverleaf Elementary	89%
East Iredell Elementary	98%
N B Mills Elementary	70%
Scotts Elementary	100%
Third Creek Elementary	87%
Union Grove Elementary	100%
West Clayton Elementary	100%
West Smithfield Elementary	100%
South Smithfield Elementary	93%
Maysville Elementary	100%
Trenton Elementary	100%
La Grange Elementary	100%
Northeast Elementary	100%
Battleground Elementary	100%
Love Memorial Elementary	100%
Childers Elementary	100%
S Ray Lowder Elementary	100%
South Creek Elementary	100%
North Cove Elementary School	100%
Pleasant Gardens Elementary School	100%
West Marion Elementary School	97%

David Cox Road Elementary	44%
Hickory Grove Elementary	81%
Hornets Nest Elementary	41%
Huntingtowne Farms Elementary	52%
Joseph W Grier Academy	70%
Lebanon Road Elementary	54%
Montclair Elementary	58%
River Oaks Academy	95%
Pinewood Elementary	57%
Piney Grove Elementary	93%
Reid Park Academy	70%
Starmount Academy of Excellence	52%
Sterling Elementary	96%
Winding Springs Elementary*	32%
Winget Park Elementary	78%
Candor Elementary	100%
Aberdeen Elementary	100%
Robbins Elementary	100%
Southern Pines Elementary	100%
Bailey Elementary	100%
Cedar Grove Elementary	100%
Middlesex Elementary	100%
Spring Hope Elementary	100%
R Freeman Sch of Engineering	64%
John J Blair Elementary	97%

Wrightsboro Elementary	98%
Central Elementary	100%
Willis Hare Elementary	100%
Hunters Creek Elementary	100%
Southwest Elementary	98%
Summersill Elementary	100%
Cape Fear Elementary	100%
Rocky Point Elementary	97%
Ayden Elementary	100%
Belvoir Elementary	100%
Falkland Elementary	100%
Lakeforest Elementary	95%
Northwest Elementary	96%
Wahl Coates Elementary	100%
Liberty Elementary School	100%
Ramseur Elementary School	100%
Balfour Elementary	100%
West Rockingham Elementary	100%
Washington Street Elementary	100%
Pembroke Elementary	100%
Rex-Rennert Elementary	100%
Douglass Elementary	100%
Huntsville Elementary	100%
Lincoln Elementary	100%
John W Dillard Academy	100%

South End Elementary	91%
China Grove Elementary	100%
Koontz Elementary	87%
Shive Elementary	100%
Granite Quarry Elementary	100%
Isenberg Elementary	86%
Dole Elementary	100%
Hurley Elementary	100%
Knollwood Elementary	100%
Morgan Elementary	100%
North Rowan Elementary	100%
West Rowan Elementary	93%
Roseboro Elementary	100%
Laurel Hill Elementary	100%
Wagram Elementary	100%
Aquadale Elementary	72%
Endy Elementary	100%
Walnut Cove Elementary School	100%
Mountain Park Elementary	100%
Pisgah Forest Elementary	100%
T C Henderson	100%
Tyrrell Elementary	100%
Benton Heights Elementary	91%
East Elementary	100%
Porter Ridge Elementary	88%

Union Elementary	100%
Walter Bickett Elementary	100%
Western Union Elementary	100%
Wingate Elementary	95%
Carver Elementary	100%
Clarke Elementary	100%
New Hope Elementary	100%
E O Young Jr Elementary	100%
E M Rollins Elementary	100%
River Bend Elementary	100%
Aversboro Elementary	100%
Banks Road Elementary	100%
Baileywick Road Elementary	75%
Brier Creek Elementary	100%
Dillard Drive Elementary	100%
Durant Road Elementary	100%
East Garner Elementary	100%
Forest Pines Drive Elementary	100%
Fuquay-Varina Elementary	100%
Green Elementary	100%
Harris Creek Elementary	100%
Lockhart Elementary	100%
Millbrook Elementary	100%
Powell Elementary	100%
Rand Road Elementary	100%

Smith Elementary	100%
Southeast Raleigh Elementary	100%
Vandora Springs Elementary	100%
Wake Forest Elementary	100%
Wakefield Elementary	100%
Wakelon Elementary	100%
Wilburn Elementary	100%
Zebulon Elementary	100%
Mariam Boyd Elementary	100%
Vaughan Elementary	100%
Creswell Elementary	100%
Pines Elementary	96%
Eastern Wayne Elementary	100%
Tommy's Road Elementary	100%
Boomer-Ferguson Elementary School	91%
C C Wright Elementary School	100%
John W Jones Elementary	100%
Margaret Hearne Elementary	100%
Vick Elementary	100%
Jonesville Elementary	100%
West Yadkin Elementary	100%

*School is not used in the sample.