EXAMINING THE RELATIONSHIP BETWEEN TEACHERS' PERCEPTIONS OF SCHOOL CLIMATE AND STUDENT ACHIEVEMENT OF MIDDLE SCHOOL STUDENTS

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Dedication

I dedicate this dissertation to my mother (Willie Mae Wiser), father (Bud Wiser), and sister (Phyllis Mattox). They were my biggest supporters, and none had the opportunity to witness me complete this journey of going through the doctoral process. Phyllis inspired me to begin, assisted me throughout the process, and was my biggest cheerleader until she made her transition to heaven. I love you sister, and my hearing your voice is what kept me going. Your constant encouragement will never be forgotten.

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ABSTRACT

EXAMINING THE RELATIONSHIP BETWEEN TEACHERS' PERCEPTIONS OF SCHOOL CLIMATE AND STUDENT ACHIEVEMENT OF MIDDLE SCHOOL STUDENTS

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The purpose of this mixed-methods study was to examine the relationship between teacher's perceptions of school climate and student achievement of middle school students. Two hundred twenty middle school teachers, from a large urban school district located in the Southwestern region of the US, participated in the *New Jersey School Climate Survey*. Student achievement was measured using the Reading and Mathematics STAAR test. Data collected from the survey and interviews revealed that administrative support, building relationships, teaching and learning, and school safety are crucial factors that contribute to having a positive school climate. Because states are holding schools accountable for student achievement, and improving school climate, this study could provide significant contributions to school districts, administrators, and to the global discussion on the relationship between school climate and student achievement.

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CHAPTER I:

INTRODUCTION

Across the globe, a growing number of departments of education are focusing on school climate as a foundational feature of school improvement and reform (Reynolds et al., 2017). With the passage of The No Child Left Behind Act (NCLB), which was instituted 20 years ago, an effective school came to be defined by its performance on state assessments, especially the scores students received on reading and math assessments (Temkin et al., 2021). The Every Student Succeeds Act (ESSA) replaced NCLB in 2015 and requires states to employ a more extensive definition of school quality (Buckley et al., 2017). Under ESSA, states must hold schools accountable for not only performance in reading and math, English language proficiency, and graduation rates, but also their performance on at least one non-academic School Quality/Student Success Indicator (SQSS), such as providing a safe and supportive learning environment (Temkin et al., 2021). The National School Climate Center (2021) defined school climate as the quality of school life based on the experiences of students, parents, and school personnel and replicated the values, structures, relationships, and teaching and learning practices of a school. School climate involves many different facets of the school environment. The present study is a contribution to former analyses intended to examine the possible relationship between school climate and student achievement of middle school students. This chapter describes the research problem, the significance of the study, the research purpose and questions, and provides definitions of key terms.

Research Problem

While the academic performance of students is important, the environment in which students learn and develop emotionally is equally as important. School climate evaluation has become an important aspect of policy at the local, state, and federal levels

(Cardillo, 2013). According to the National Center on Safe Supportive Learning Environments—NCSSLE (2021), a positive school climate improves attendance, student achievement, and retention rates. Many states' departments of education have recognized the importance of including school climate measures in their accountability systems, and state officials should hold schools responsible for providing every child with a healthy atmosphere to learn and develop (Temkin et al., 2021). Theorists have conceptualized school climate as the perceptions of individuals who work in a school in regard to student achievement, treatment of students, student-teacher relationships, school safety, and reputation of the school environment (Lynch et al., 2013).

Research has indicated when schools and districts focus on cultivating school climate, students are more likely to participate in the curriculum, work well with others, and demonstrate optimistic behaviors (NCSSLE, 2020). School climate has been reported to have a direct connection with students' academic performance and can also act as a protective factor for economically disadvantaged students (Reynolds et al., 2017). A positive school climate is associated with high attendance rates, test scores, and promotion rates; alternatively, a negative school climate can harm students and is associated with lower student achievement, and it creates opportunities for cruelty, bullying, and self-destruction (NCSSLE, 2021). In order to understand the factors influencing the educational outcomes of a student, it is necessary to understand how the school operates (Back et al., 2016). Students are the clients in the school setting and need nurturing in order to flourish. Walker (2016) believed that schools that have infused academics with climate are the schools that are successful over multiple years.

The principal, as the school leader, is responsible for managing all aspects of the school. According to Lewis et al. (2016), principal leadership is a significant component in the progress and sustainment of school climate, and teacher perceptions of a principal's

style can also influence school climate. The actions of the principal significantly influence the climate of the school. The most important job of the principal is to produce a school environment where students feel safe, supported, engaged, and understood (Prothero, 2020).

Kominiak (2018) concluded that schools with the highest learning gains had principals who promoted a strong school climate by empowering and coordinating the work of teachers and school staff around shared goals. Principals work closely with staff to clarify and support innovation, and they work collaboratively with other change agents, such as assistant principals and teacher leaders, throughout the school year (Lewis et al., 2016). Effective principals develop a collaborative work environment by consistently modeling, upholding school values, providing opportunities for teacher leadership, and screening incoming applicants to ensure they are an appropriate fit for the climate of the school (Kraft & Falken, 2020). A school's success is mostly determined by the efficiency of the principal and the commonalities in what effective principals do in terms of being an instructional leader, interacting with teachers, and building strong climates where teachers work collectively to reach common goals (Grissom et al., 2021).

Positive relationships among the principal, staff, students, and parents reinforces a school's climate. Strong connections between teachers and students makes teachers feel encouraged by the work they perform, and teacher collaboration helps teachers feel more supported (Prothero, 2020). The work by Bryk and Schneider (as cited in Davis & Warner, 2018) speaks to the importance of having trusting relationships between teachers, school leaders, and parents and the positive effects of these relationships on student achievement. Likewise, beliefs, shared values, patterns of behavior, and actions will progress the farthest and be reinforced when everyone is communicating and collaborating with each other (Shafer, 2018). Relationships between teachers and

students constitute an important dimension of social skills in classrooms and have been reported to have substantial effects on students' motivation, engagement, and student achievement (Lin et al., 2020).

Teachers play a key role in providing a positive and inspiring learning atmosphere for students to achieve when the entire campus is involved collaboratively, creating a campus structured around teaching and learning. According to Xuan et al. (2019) when students enter school, teachers become significant mentors, surpassing even parents, and students who have positive relationships with their teachers tend to have positive expectations and values for success. Teachers set the tone for teaching and learning in the classroom.

A safe school environment allows students and teachers to focus on learning and minimizes disturbances in class (Kraft & Falken, 2020). School safety can affect teachers' work and their students learning. According to Maxwell (2016), the physical and social environment of a school are linked together, and both are associated with student achievement. When teachers and students feel unsafe, they are not able to perform to their greatest abilities (Bernardy & Schmid, 2018). Furthermore, emphasis is placed on their personal well-being, as opposed to concentrating on teaching and learning.

Teachers' perceptions of school climate factors, including quality of relationships, commitments to student learning, principal leadership, and collaboration have been found to account for a substantial amount of teacher mobility and teachers leaving the field of education (McLean et al., 2017). How teachers perceive a principal's leadership style can have an influence on school climate (Lewis et al., 2016). Similarly, teacher assessments of school climate depend mainly on their perceptions of their principal, as opposed to supplementary school and district factors (Burkhauser, 2016). Schools with

climates of collegiality and collaboration enhance teachers' professional competence and shapes how teachers perceive themselves beyond the classroom causing them to be more committed and involved (Banerjee et al., 2017). An effective school leader, teachers working collaboratively, and an orderly school environment are positively associated with teachers' self-efficacy and satisfaction with their profession (Oder & Eisenschmidt, 2018).

In conclusion, the NCSSLE (2020) expressed that students perform best when they are in school climates where they feel safe, supported, and acknowledged. Wang and Degol (2016) concluded that an optimistic school climate leads to higher student achievement when it is characterized by positive teacher-student relationships and high expectations. According to Sulak (2016), a positive school climate can positively affect academic achievement, but a negative school climate, defined by a surplus of disciplinary issues, may weaken academic achievement. Astor and Benbenishty (2018) expressed that school climate theory has been limited by neglecting to identify mechanisms by which aspects of school climate are connected with student outcomes such as student's academic achievement.

Significance of the Study

Research has indicated that school climate is one of the most significant factors that influences the success or failure of a school (Hadiyanto, 2018). While historically schools may have fixated only on academics to determine their success, schools are now focusing on developing students is a more all-inclusive way (Borkar, 2016). There is not a global consensus about how to describe school climate, as some researchers claim school climate affects student achievement positively, and others have found no relationship between school climate and student achievement (Zysberg & Schwabsky, 2020). Over the last several decades, researchers and educators have realized how

oversimplified the initial conception of school climate was, and the parameters of school climate must be solidified to better understand the effectiveness of its characteristics on student achievement (Wang & Degol, 2016). This study was designed to increase the knowledge and understanding of the potential relationship between teachers' perceptions of school climate and student achievement of middle school students.

Research Purpose and Questions

The purpose of this study was to examine the relationship between teachers' perceptions of school climate and student achievement of middle school students. The following research questions guided this study:

Is there a relationship between administration support and student achievement? Is there a relationship between building relationships and student achievement? Is there a relationship between teaching and learning and student achievement? Is there a relationship between school safety and student achievement? What are teachers' perceptions of school climate factors that influence student achievement?

Definitions of Key Terms

Middle School: For this study, students in their adolescent years in Grades 6 through 8 (Ware et al., 2021).

Principal: Refers to the school principal; principals are responsible for the overall management of schools. They maximize opportunities for teachers and students to be successful. They advocate for the school and deliver local education solutions to the aspirations and demands of parents and the wider school community (Western Australia Department of Education, 2019).

Relationships: Positive interactions between students, adults, and peers in the school that foster positive social interaction and establish a nurturing environment of trust and support (NCSSLE, 2020).

Safety: School safety is defined as schools where students are safe from violence, intimidation, harassment, and substance use (NCSSLE, 2020).

School Climate: School climate refers to the patterns of social connections in the school that distinguishes it from other schools (Konold et al., 2018).

School Environment: The institutional environment categorized as school connectedness/engagement, physical layout, surroundings of the school, resources, supplies, and safety (Thapa et al., 2013).

Student Achievement: Students demonstrating successful knowledge and skills on the mathematics and reading State of Texas Assessment of Academic Readiness (STAAR) exam (Texas Education Agency [TEA], 2012).

Teacher Behaviors: The term used for the behavioral appearance of the act of teaching, by facilitating the learning of a student or a collection of students, which includes the verbal and nonverbal actions shown by a teacher in an effort to impart education within an academic setting (Rashid & Zaman, 2018).

Teachers' Perceptions: How teachers perceive the school setting can influence their intrinsic motivation and self-efficacy, which can ultimately affect students' learning and achievement (Reaves & Cozzens, 2018).

Teaching and Learning: Engagement with students to enable their understanding and application of knowledge, concepts, and processes, which includes design, content selection, delivery, assessment, and reflection (Stellenbosch University, 2013).

Conclusion

This chapter provides an overview of the need for the study, significance of the problem, research purpose and questions, and key definitions relating to this study. The present study will be a contribution to whether or not there is a relationship between school climate and student achievement. The next chapter will provide a discussion of the literature relevant to the topic.

CHAPTER II:

REVIEW OF THE LITERATURE

Determining why some schools perform better than others has been a topic of discussion for years. In teachers' lounges and principals' offices, there are conversations formed around the topics of students, parents, the principal, the school environment, and whether or not the school will be successful. Having an optimistic climate, most stakeholders believe, is what most schools desire, as no school seeks to nurture environments that are detrimental to students and teachers (La Salle, 2018). School climate has been described as the quality and character of school life, including both social and physical characteristics of the school, that can positively encourage behavior, campus achievement, and the social and emotional expansion of students (Borkar, 2016). School climate incorporates the social, emotional, and physical characteristics of a school community (Schaffhauser, 2017). The purpose of this study was to examine the relationship, if any exists, between school climate and student achievement. To address these areas, the literature review focused on (a) school climate and student achievement, (b) administration support, (c) building relationships, (d) teaching and learning, (e) school safety, and (f) teachers' perceptions of school climate factors that influence student achievement.

School Climate and Student Achievement

School climate may be described as a collective measure of a school's characteristics, such as interactions between parents, leaders, and teachers, as well as experiences that impact student and adult subjectivity (Davis & Warner, 2018). A positive school climate has been linked to indicators of school success, such as standardized test scores, yearly pass measures, and school report card information (Destefano et al., 2007). In a study conducted by Duraku and Hoxha (2021), the

associations between school climate domains and how school climate interacts with student performance were investigated. A sample of Kosovan students (N=855) was assessed using the school climate survey developed by the New Jersey Department of Education, in partnership with the Bloustein Center for Survey Research at Rutgers. The average age of the participants was 13.55; 58.6% were male and 41.4% were female. Survey items were developed on a 5-point Likert-type scale, and items measured included attitudes toward teaching and learning, morale in the school community, and school safety. Prior to conducting the primary analyses, preliminary analyses were completed to inspect bivariate associations between variables, and no significant correlation was found. Measured items were examined using multiple linear regressions with all probable predictors. Analyses were conducted in SPSS v. 24. Findings suggested that students had positive perceptions of the domains of teaching and learning and safety. Additionally, results showed a positive correlation between students' perceptions of school safety and their academic achievement in school.

To determine the effect of student perceptions of negative school climate on poor student achievement, Saputra et al. (2020) conducted a study. The study used cluster sampling in which 1,263 students were sampled out of a population of 9,687,676 secondary students in Indonesia. Data were collected using the perception of negative school climate scale (PNSCS) and the academic performance scale (APS). The PNSCS consisted of 29 statement items and was established using three features, specifically, collegial, intimate, and supportive. The APS consisted of 19 statement items and was developed using three components: academic success, impulse control, and academic efficiency. Data were analyzed using simple linear regression. Prior to conducting the simple regression test, the assumptions were tested first; namely, the linearity and normality assumption test. Based on the examination of the assumption test, it was

determined that the data were normal and linear. Findings indicated that student perceptions of a negative school climate had an effect on 58.7% of their poor student achievement. The study recommended that schools should establish a positive school climate to create ideal student development of a peaceful mind so that the school climate can be conducive for learning and student achievement.

Daily et al. (2019) conducted a study to determine the relationship between school climate and student achievement among middle and high school students. A total of 1,358 students registered in Grades 6-8 and 2,040 students in Grades 9-12 were surveyed using a cross-sectional, purposeful cluster sample from three middle and two high schools in a Mid-Atlantic U.S. state. Across the three middle schools, the sample involved 1,154 respondents (82.4% response rate). Data cleaning procedures removed 24 (2.1%) responses resulting in a final analytical sample of 1,130. The high school aggregate sample consisted of 1,325 participants (64.6% response rate). Data cleaning actions removed 50 (3.8%) of responses resulting in a concluding analytical sample of 1,275.

The School Climate Measure (SCM), a multidimensional instrument, was used to measure variables connected with school climate. The survey instrument contained 262 items and took 30 to 45 minutes to complete. Data were collected using an anonymous paper-and-pencil or web-based questionnaire. Data analysis included descriptive statistics, confirmatory factor analysis, and analysis of variance. Findings suggested that school climate is associated with students' academic achievement in secondary schools. For middle and high school students, being supported academically in relation to student performance is of importance when students transition from middle to high school. Furthermore, this study suggested that the individuality of domains should provide

insight on what is important for practitioners to focus on when evaluating school climate as it relates to academic achievement.

In a study to test the authoritative school climate theory that schools characterized by high structure and student support have better measures of student achievement, Konold et al. (2018) evaluated the model in relationship to standardized secondary academic outcomes. The model was tested through a multilevel multi-informant structural model on a statewide sample of 60, 441 students and 11,442 teachers in 298 high schools. The teachers were predominantly female (66.9%) and from the student sample 51.2% were female. Participants completed the Virginia Secondary School Climate Survey (Cornell, Huang et al., 2016), which was administered online. The survey consisted of 100 items that included the measures of Structure, Support, and Engagement. Students completed their survey questions in their classrooms under adult supervision. Student and staff survey items covered similar content with adjustments in wording to accommodate distinctions in roles and viewpoints. Results indicated a strong correlation between having a positive school climate and student achievement. Furthermore, consistent with the authoritative school climate model, structure and student support were essential to student engagement, which was directly affiliated with higher student achievement.

In a similar study, Davis and Warner (2018) investigated the relationship between school climate and student achievement in New York City Department of Education (NYCDOE) high schools. The sample consisted of 263 high schools and a total of 1,195 student background, achievement, and school climate variables. The authors used a data set compiled from 2010-2011 NYCDOE school-level aggregated demographic, survey, and progress report achievement data. Learning environment surveys were given to teachers, students, and parents in Grades 6 through 12 to measure the climate of each

school. The surveys use Likert-type scales in their question responses, and each response had a point value between 0 and 10. Questions fell into the following school climate categories: academic expectations, communication, engagement, and safety. Data were analyzed using SPSS, and because of limitations with the data set, they were only able to conduct an ordinary least squares regression analysis. Findings suggested that a school's climate significantly correlated with student achievement progress. An equally significant finding was that under certain circumstances, the school climate factors outweighed the effects of student background factors. The school climate domains of safety and respect, communication, engagement, and academic expectations all proved to be critical factors essential to student achievement.

As portrayed in the above studies, school climate is positively associated with student achievement. It is critical to analyze whether the same pattern is recurring when studying the relationship between school climate and student achievement based on various school climate dimensions. The next section will examine, in depth, the relationship between administration support and its impact on school climate and student achievement.

Administration Support

The school leader is considered one of the most influential factors in the development of the quality and character of a school (Lewis et al., 2016). In reference to the development of a positive school climate, leadership plays an important role. In schools with strong professional climates and an instructional focus, teachers' instructional practices improve and student achievement increases (Grissom et al., 2021). School leaders should develop a school climate of collaboration, trust, and respect and must provide teachers with the essential resources to be successful.

In a meta-analysis study conducted by Karadag (2020), multiple leadership methods were combined and the relationship between their leadership and student achievement was analyzed. In order to obtain the sample, a literature review was performed in ScienceDirect, Proquest, and Ebsco databases to determine which studies would be included in the study. Based on certain keywords and titles including leadership and student achievement, 280 research articles/dissertations were selected. Based on the abstracts, and some not being related to educational leadership, a number of articles/dissertations were excluded leaving 151 of them that met the inclusion criteria defined for the study. Features of the studies included in the meta-analysis included the year the research was published, type of research, leadership theories of research, courses of research, and the level of education at the school. The studies were conducted between 2008 and 2018, included statistical information required for correlational metaanalysis, and measured educational leadership. A coding procedure was used to extract data from the compiled information in the studies. Based on the findings of the study, educational leadership has a medium-level effect on students' achievement; however, in vertical-collectivist cultures (e.g., in Asian), educational leadership has a comprehensive effect on student achievement.

In a study to examine how principal support, collective ownership, professional learning communities, and teacher expectations affect student mathematics achievement, Park et al. (2019) found that principal support positively influenced professional learning communities and collective responsibility, which in turn, affected student mathematics achievement through group-level teacher expectations. Conversely, the impact of principal support on the above-mentioned were not statistically significant. The sample consisted of 25,206 ninth graders representing 767 public schools and 177 private schools from 1,889 eligible schools across the nation during the 2009 Fall term. Teacher data

were collected from math teachers who taught ninth-grade students of HSLS:09.

HSLS:09 is a nationally representative longitudinal survey study that used a two-stage stratified sample with schools as the first-stage unit and a random sample of students within each school as the second-stage unit. Students who participated in the 1st year and students who participated in the follow-up year were chosen to answer the anticipated research questions. This study used a multilevel structural equation model to examine how principal support affect math achievement. Findings indicate how principal leadership indirectly affects teachers' behaviors, which are associated with student achievement.

According to Tan (2018), principals are charged with developing high-quality schools that have positive school climates and encompass collaborative cultures, while developing an academic vision for the school. Huang, Hochbein et al. (2020) conducted a study to determine if principals were spending their time in an impactful way. The study sought to find out whether principals spent time across various school settings, or whether principal's time was used to focus on critical areas such as school climate and student achievement. The sample consisted of 430 schools randomly selected from the United States. The Trends in International Mathematics and Science Study (TIMSS) principal survey was used, as the questionnaire provides more numerous questions regarding principal's use of time and other relative variables than other surveys.

In addition to the survey, TIMMS' student mathematics achievement data were used. A simple descriptive analysis was conducted to see if time use among principals was consistent with the impactful behaviors described by the meta-analytic literature. A cluster analysis of principals' time use was used to separate principals into clusters based on how they spent their school day. To determine the relationship between principals' time use, patterns, school processes, and student achievement, a series of bivariate

analyses were conducted. To compare differences in school enrollment, school climate, student behavior, and teacher attendance, a one-way ANOVA using the cluster classification as the grouping variable was utilized. Findings indicated that American middle school principals' jobs continue to be overwhelmed with managerial tasks that are impulsive and fragmented. Principals could be classified as Eclectic Principals or Balanced Principals. Schools with high poverty, a large population of English language learners, and located in urban areas were associated with Eclectic Principals, while schools led by Balanced Principals tended to perform better than those led by Eclectic Principals. However, the achievement difference was not statistically significant at .05 level.

Being a leader means celebrating and empowering staff, students, and community, and building trusting relationships (Prokopchuk, 2016). In examining how principals establish a positive school climate to sustain school improvement efforts, Hollingworth et al. (2018) conducted a multiple case study that focused on how principals encourage positive school climate to support the implementation of change initiatives. The purpose of the study was to explore how principals involved staff to create an optimistic learning environment and how their influence on climate impacted classroom practice.

The sample consisted of four principals who were identified as exceptional leaders by the state's Department of Education and school district superintendents in their Midwestern schools. The study was part of a 3-year project to understand the implementation of state-driven reform initiatives in schools. Multisite qualitative data from the first 2 years indicated that successful change is based upon the quality of building and sharing leadership in the schools. The 3rd year of the project focused on observing how principals impact climate for effective implementation of new initiatives.

Organizational values and change theories served as the lenses for analysis. Three leadership practices of successful principals emerged during data analysis including cultivating trust, getting to know the staff, and engaging in purposeful communication. Principal effectiveness was determined by their reputations within and outside of the district, as well as state test scores. Findings from this study concluded that the four principals implemented numerous strategies that built positive school climate.

In a study conducted by Khan and Shaheen (2016), the leadership role of secondary school principals in Karachi and its impact on student achievement was examined. The main purpose of the study was to identify the leadership roles of principals that truly have an influence on students' academic achievement. Stratified random sampling design was used to obtain the sample. The sample consisted of 90 principals and 360 students from 90 government and private secondary schools of Karachi. There were 15 schools selected from each district, and a questionnaire of 30 items and an interview protocol were used as research instruments. The data were obtained through personal visits, and the data were analyzed through statistical techniques (percentage and *t*-tests). The study found that trained secondary school principals were found more effective than untrained secondary school principals in respect to student achievement. Additionally, principals who shared their authority helped teachers adopt useful teaching and learning techniques for student achievement and increased teacher performance.

As past and current research continually showed, administrative support may play an important role in the relationship between school climate and student achievement. Considering this confirmation, it may be important to analyze the impact that building relationships may have on school climate and student achievement. The next section will explore, in detail, the essentials of leader and teacher collaboration.

Building Relationships

Collaboration between school leaders, teachers, and students is important in a school setting. Leaders and teachers have to work together in order to plan, set goals, evaluate practices toward meeting set goals, and make changes as needed. Success of a school relies heavily on the codependent relationships of all stakeholders operating in numerous capacities, and those relationships are strengthened by each individual understanding their personal responsibilities, as well as having clarity around the obligations of their colleagues (Moses, 2019).

Liang et al. (2020) conducted a study that focused on the experiences of boys of color pertaining to perceptions of relationships and teacher behaviors and attitudes. The sample included 23 middle school and 99 high school-aged boys (122) who participated in a community-driven basketball program. These students, age 12 to 19 years old, shared about school climate, their experiences, and interactions with their peers. The semistructured interview protocol was used for this study. Focus groups were scheduled, recorded, completed, and transcribed. Constant comparative analysis of focus group interviews generated the following five themes: school climate, respect and lack thereof, discrimination, facilitative conditions, and barriers to student achievement. These are barriers to student success and achievement; however, students who participated were not without hope. Students demonstrated mindfulness of the importance of having healthy relationships with teachers. Although some students experienced distrust, findings indicated that students realize they need caring teachers to help them progress.

In an attempt to explore student's perceptions of school relationships, Newland et al. (2019) conducted a phenomenological study to examine if those relationships supported or damaged student's emotional well-being (EWB). Twenty-three students, aged 8 to 13, participated in this substudy of a multinational comparative investigation.

The study followed a semistructured qualitative interview protocol. Rural and urban students from the midwestern US participated in the interview and mapping exercise used to explore facets on their personal well-being. Analyses of interview transcripts focused on the essence of children's EWB within the context of school relationships and children's perceptions of how relationships affected their EWB. Students expressed positive and negative emotions in regard to the quality of school relationships. Findings indicated there is a need to improve and cultivate school relationships and climate to support children's emotional well-being.

In order for teachers to work together as a team, relationships must be built. Teacher collaboration has gained growing attention from the research field; however, little has been said about the relationship between teacher collaboration and student achievement. Mora-Ruano et al. (2019) conducted a study to examine the effects that the three forms (instruction, project, and organization) of teacher collaboration proposed by the Programme for International Student Assessment (PISA) may have on student achievement. The purpose of this study was to find out to what extent teacher collaboration influences student achievement as measured by mathematics, biology, German, physics, and chemistry dependent on the form of relationship.

In order to appropriately evaluate these two variables, teachers and students were matched, resulting in a subsample of 869 teachers (44.5% women, 55.5% men) with an average age of 47.3 and in a corresponding subsample of 869 students. Question 21 on the National Questionnaire for Teachers was used to measure the frequency of teacher collaboration based on PISA 2012. Student achievement was measured based on grades students earned during the first semester in 2011-2012. Data analyses were conducted using the software packages SPSS 25 and AMOS 25. A full structural equation model was run to discover the influence that relationships and teacher collaboration had on

student achievement. Findings demonstrated that a positive result on student achievement can be established when teachers explicitly work together to discuss student achievement.

Ohlson et al. (2016) conducted a study to examine school climate and student outcomes through a performance framework. This study is a report of the relationship between having a collaborative campus climate, teacher value, and the impact these variables have on student attendance and out of school suspensions, which impacts school climate. Data were collected from 50 public schools throughout the southeastern United States. There were 1,657 teachers who participated in the study, and the average response rate was 66% within each school.

The School Culture Survey was the instrument used to examine teacher quality, elements of leadership, and mechanisms of a collaborative school climate. After being emailed a link from administrators, data were collected using an online survey tool. Data were analyzed using correlational analysis, multiple linear regression, and descriptive statistics. Teacher collaboration arose as an important school climate feature related to student results. The findings indicated that quality teaching and school climate has the greatest impact on student achievement, students remaining in school, and may influence educational policy, teacher staff development, and school reform initiatives.

After observing the role that building relationships and collaboration plays in school climate and student achievement, it seemed imperative for the purpose of this study to consider other factors of school climate such as teaching and learning and student achievement. It was critical to examine, in depth, the effect that teaching and learning may have on school climate and student achievement. The next section will survey, thoroughly, the weight of this factor.

Teaching and Learning

Researchers communicate about teacher ability as if it were transferable across school settings; however, teachers' performance depends on how congruent their skills are with their students' needs and the school environment (Kraft & Falken, 2020). Felder and Spurlin (as cited in Khalid et al., 2017) argued that when the teaching styles of instructors do not match the learning styles of students, this results in students becoming inattentive, uninterested, performing poorly, and even leaving the school. Teacher behavior encompasses all the verbal and nonverbal actions demonstrated by a teacher in an effort to impart education within an academic setting (Rashid & Zaman, 2018). Kaplan and Owings (2004) discovered that the quality of teaching as well as the teacher are the strongest indicators of student achievement.

Giota et al. (2019) conducted a study to investigate student understandings of teaching practices in Grade 9 at 2003, 2008, and 2014 after the Swedish education reforms of the 1990s. The study sought to investigate if teaching practices were related to student achievement and family background. The intentions of the study were investigated using data on teaching practices from three nationwide representative student cohorts (born in 1987, 1992, and 1998), attending the Swedish compulsory school in ninth grade. Students in the study were sampled by Statistics Sweden when they attended Grade 3.

The cohort born in 1987 consisted of 9,548 students, with 6,872 students responding to the survey. The cohort born in 1992 consisted of 9,890 students, providing a response rate of 61%. The cohort born in 1998 comprised of 9,549 students, with 4,573 responding to the questionnaire. Distributions of students, with respect to teaching practices, were examined using contingency table analysis. Mean differences of average merit were tested using analysis of variance (ANOVA) and independent samples *t*-tests.

Findings demonstrated changes from more traditional teaching practices to more individualistic teaching practices, where students are able to work with large projects, are more beneficial for student achievement.

Rashid and Zaman (2018) conducted a study focused on the effects of teachers' behavior on academic performance of students. The sample for this research included the entire student population from the Shaheed Zulfikar Ali Bhutto Institute of Science and Technology Islamabad. Stratified proportionate sampling technique was used and 141 students were selected out of 1,772. A questionnaire based on teacher's behavior inventory was used to collect the data, and the inventory measured eight aspects of behavior. A cross-sectional survey was conducted to measure the effect and to find out the relationship between variables.

Teacher's behavior, as measured by the standard inventory used in this research, included eight components of behavior (clarity, enthusiasm, interaction, organization, pacing, disclosure, speech, and rapport) while student achievement was measured by the student's Cumulative Grade Point Average (CGPA). Data were collected through voluntary contribution from respondents and were coded and entered into SPSS software for purposes of allowing quantitative data analysis. Based on the analyzed data, teachers' behavior has a significant relationship with student achievement. There was a significant relationship with students achievement when it came to clarity, interaction, pacing, disclosure, speech, and rapport. There was no relationship on academic achievement with enthusiasm and organization (Rashid & Zaman, 2018). Findings encouraged those teaching behaviors that have an effect on student achievement and rejected those behaviors that are associated with low academic performance.

Mahler et al. (2018) conducted a study to further contribute to the clarification of the predictors of students' achievement and teaching in schools. The relevance of

teacher's knowledge for successful students' learning has been studied for many years; however, the meaning of teachers' motivational alignment for student achievement still lacks clarity. In this study, the construct was hypothesized by three domains: self-efficacy, subject-specific enthusiasm, and predictors of students' learning. The sample included 48 biology teachers and 1,036 of their students. Paper and pencil tests were used to assess the three domains. Student performance was measured by concepts maps and paper and pencil tests. The correlation between teachers' motivational orientations and student achievement was specified by multilevel structural equation models. Findings indicated there was not a significant relationship between teachers' self-efficacy and student achievement; on the other hand, there was a positive relationship between student achievement and teachers' enthusiasm for teaching the subject.

Martinez et al. (2016) conducted a study to examine the relationships among teacher and school-level constructs, including teacher collaboration, supervision, discipline, instructional management, and student-related outcomes including barriers to learning. The sample included 171 teachers across 29 urban high schools in a large Midwestern city serving primarily low-income students. Teachers completed self-report surveys, and multilevel regression was used to test individual and school-level predictors of student results. Several scales were used to rate teachers working together, teacher discipline/supervision, teacher instructional management, and school issues. It further examined school-level contributions of teacher practices to student outcomes. Findings in this study indicated that supervision and attentiveness to student behavior, and the ability to effectively manage instruction are consistently associated with satisfactory student results. Instructional management is also connected to optimistic social-behavioral climate.

As past and current research shows, teaching and learning play an optimistic role in the relationship between school climate and student achievement. Considering this assertion, it may be important to analyze the impact that school safety may have on student achievement. The following section will explore, in detail, the necessities of school safety and student achievement.

School Safety

Feeling safe at school has been correlated with student's academic achievement, engagement, and overall welfare (Varela et al., 2017). Hughes and Pickeral (as cited in Reaves & Cozzens, 2018) revealed that top priorities when establishing and maintaining a safe supportive school are the safety of students and staff, the safety of school buildings, and the areas surrounding the school. A topic that commonly surfaces when discussing school environment is safety, and because of the connection between safety and positive school outcomes, the topic warrants additional examination (Ruiz et al., 2018).

If students feel unsafe at school, they may be less likely to attend school, or less able to focus on learning while at school. Lacoe (2020) conducted a study to determine how feeling unsafe in the classroom can affect student achievement. The author mentioned that feeling unsafe in school may affect test scores if it distracts students from learning. In this study, the sample included over 340,000 students in the sixth, seventh, and eighth grades. The New York City Department of Education implemented a school environment survey for students in Grade 6 and above. More than 80% of the middle school students in the district responded to the survey, which was administered to more than 700 public schools. The connection between feeling unsafe in the classroom and student achievement was estimated using a sequence of ordinary least squares (OLS)

regression models. Findings illustrated there is a negative connotation associated with feeling unsafe in the classroom and student achievement.

Feeling unsafe at school decreases the achievement of middle school students, and the greatest impact is discovered in schools with the most violence (Lacoe, 2016). In an attempt to examine if school climate enhances or worsens the impact of neighborhood violent crime on middle school students' test scores in New York City public schools, Laurito et al. (2019) conducted a study. The analytic sample contained 16,146 students in 533 schools in Grades 6 to 8 from academic years 2006-2007 to 2009-2010. The sample was limited to students who were exposed to violent crime within 1 week of taking the English Language Arts (ELA) test. Crime data were obtained from the New York Police Department (NYPD) on daily violent crime, longitudinal student administrative records were retrieved from the city's Department of Education, and the Learning Environment Survey is used to obtain measures of school climate. Findings suggested that middle school students, who attended schools seeming to be less safe and exposed to neighborhood violent crime before the ELA exam, scored lower than students who attended schools with better climates.

In a study to assess the role of community violence in explaining the relationship between socioeconomic status (SES) and student achievement outcomes and the potential of positive school climate to enhance student achievement, Ruiz et al. (2018) sampled 297 Chicago public elementary schools. Community and school-level data were examined using Geographic Information Systems (GIS) mapping to demonstrate how student achievement corresponds with local economics and crime data. The American Community Survey data were gathered through the National Historical Geographic Information System database. Findings indicated that lower SES was associated with lower student achievement, and violent crime somewhat facilitated this relationship.

School climate was positively associated with student's academic achievement, and safety significantly moderated the connection between SES and student achievement. Findings also indicated that high performing schools do exist in low-income neighborhoods where high crime exists.

Although some students feel unsafe at school, insufficient workable factors have been identified to increase students' feelings of safety in school. Fisher et al. (2018) conducted a study to examine the degree to which students' perceptions of school climate relate to their feelings of safety, and whether their experience with violence and victimization at school may be one means by which this relation occurs. The first data source used in this study was the Education Longitudinal Study of 2002 (ELS:2002), a nationally representative longitudinal study of high school students who were in 10th grade in 2002. The ELS:2002 contained survey responses from 16,200 students, accessed via a random stratified sampling process. This study's second data source was the 2011 School Crime Supplement (SCS) to the National Crime Victimization Survey (NCVS). Participants were asked to report on their experiences regarding victimization. The SCS was administered to students ages 12 to 18 who had been in school within the past 6 months. Data were analyzed using path analysis to study the representations from each data source separately but in similar fashion. This study provides evidence that students who observe a more authoritative school climate also have greater feelings of safety. Findings suggested that students who have relationships with adults on the campus and perceive fairness and consistency of school rules, may have reduced exposure to violence and victimization, which would help students feel safer at school.

School safety can have an effect on school climate and student achievement.

When vulnerable populations are treated with respect in trying situations, they are no

longer victims of condition but managers of change (Ruiz et al., 2018). The next section will present a summary of the findings based on previous research.

Summary of Findings

Based on expansive research in determining if school climate has an effect on student achievement, it appears that positive school climates have a direct impact on student achievement (La Salle, 2018; Reynolds et al., 2017; Sulak, 2016; Walker, 2016; Wang & Degol, 2016). Positive school climate has been shown to impact students' level of learning, increase academic performance, and lead to higher test scores (MacNeil et al., as cited in Duraku & Hoxha, 2021). While studies have suggested this is the case when there is a positive school climate, negative school climate has had an effect on poor student achievement as well. The higher the students' negative perceptions of the school climate, the lower the students' academic achievement appears (Saputra et al., 2020). Although a positive school climate can enhance student achievement, the nationwide movement to improve school climate makes it necessary to define the concept more clearly as it varies across contexts at any given time (La Salle, 2018).

Effective principals understand the important role school climate and goal setting plays in developing a strong learning environment and a successful school (Grissom et al., 2021; MacNeil et al., 2009; Taylor & Williams, 2001). A school principal who creates a climate that focuses on learning is imperative in order to improve student's academic achievement in schools (Freiberg, 1999; Maslowski, 2001; Sergiovanni, 2001). Principals impact teacher behaviors which are associated with student achievement. School leaders should collaborate with teachers to labor toward the primary goal of improving teaching and learning in order to advance student achievement and improve the school community (Hoy & Hoy, 2009; Mora-Ruano et al., 2019). Principal leadership is important and where principals spend their time is of importance. Time

spent on instructional leadership including coaching, evaluation, and developing the school's vision are related to positive student achievement gains (Xu, 2018). Ultimately, the relationships that shape the climate of the school are strongly influenced by the school principal (MacNeil et al., 2009).

A major component of improving school climate has been strengthening connections between students and their learning environments, for example teachers, other adults, student peers, curriculum, and overall school climate (Lewis et al., 2016; Mora-Ruano et al., 2019). Findings indicated that supportive relationships, with caring adults, are necessary for healthy development, growth, and learning, and when adults build relationships with students, they can promote the development of positive behaviors which build confidence and impact student achievement (Darling-Hammond & Cook-Harvey, 2018). Having a collaborative school climate, where relationships are built and teaching and learning are a collective responsibility, can lead to enhanced instructional practices, individual satisfaction, and improved student achievement results for students (Blasé & Blasé, 1999; Goddard et al., 2010; Grissom et al., 2012; Lara-Alecio et al., 2012).

The teacher plays a key role in providing an inspiring learning environment for their students to grow academically (Ohlson et al., 2016; Rashid & Zaman, 2018). The authors corroborate that education occurs through teaching and learning; therefore, learning has equal if not a more important share in the achievement of students. In schools where students had positive perceptions of teaching, learning, and safety, there was high morale and better student performance (Duraku & Hoxha, 2021; Lewis et al., 2016). As it relates to student achievement, the teacher's behavior is important in enhancing student's learning and performance (Giota et al., 2019; Kaplan & Owings, 2004; Rashid & Zaman, 2018). Evidence on the connection between teaching practices

and student achievement in the literature is complex and indicates that while teaching practices such as time for learning, differentiated instruction, and cooperative learning are important for student outcomes, they have consistently minor impacts on student outcomes (Giota et al., 2019). Teachers' knowledge and enthusiasm are important for student achievement. Students think highly of their teachers, specifically those with positive mindsets, as teachers are their source of information, knowledge, and experience (Rashid & Zaman, 2018).

According to the Prusinski et al. (2019), in recent years, concerns regarding school safety have grown and instituted a feeling of urgency. Schools are consistently working to find ways to improve school climate by ensuring students are safe which can have an effect on student's academic achievement. Findings indicated that school climate is an initial factor of having a safe and protective environment that promotes connectedness and a sense of belonging with others (Bosworth et al., 2011; Varela et al., 2017). Having expectations and positive relationships among colleagues in the school setting, are significant to creating and maintaining such an environment (Bosworth et al., 2008). Fairness in schools, consistency of rules, and reduced exposure to violent discipline infractions help students feel safer at school. When students do not feel safe and supported, their absences increase, affecting their academic outcomes. Maslow (as cited in Lacoe, 2020) indicated that feeling unsafe in school may prevent students from engaging in the higher-level thinking required for them to be successful academically, decreasing student achievement on assessments. After overviewing the impact of school climate on student achievement, the following section will elaborate on the theoretical framework associated with this study.

Theoretical Framework

School climate has an extensive definition related to academic, environmental, and safety dimensions making it difficult to differentiate from other school characteristics (Wang & Degol, 2016). Cornell and Huang (as cited in Huang, Eddy et al., 2020) mentioned that if every aspect of a school encompasses school climate, then it is not clear what the concept means and how it can be measured. This study used the Authoritative School Climate (ASC) Theory, based on Baumrind's (1968) research. It identified disciplinary structure and a supportive environment as significant elements of school climate. Authoritative school climate is a pertinent construct that enhances the social-emotional development and academic achievement of students (Galvez-Nieto et al., 2021).

In ASC Theory, disciplinary structure refers to the firm, yet fair, implementation of rules, and support is identified by positive and respectful student-staff relationships (Gregory et al., 2010). Relative to school climate, teachers may observe disciplinary structure based on how consistently rules are enforced by school leaders and other teachers in the school. A supportive environment may be characterized by teachers feeling protected, respected, cared for, and allowed to have a voice in the school (Huang, Hochbein et al., 2020). Students need to feel supported as well. Student support refers to student viewpoints that school staff, including their teachers, will treat them respectfully and expect that they will succeed in school (Konold et al., as cited in Cornell, Shukla et al., 2016). As applied to the present study, this theory incorporated administration support, building relationships, teaching and learning, and school safety as important aspects of school climate.

Authoritative school climate theory concludes that schools that have disciplinary procedures in place, characterized by support and structure, encourage positive outcomes

amidst their students (Gregory et al., 2010). Cornell et al. (as cited in Encina & Berger, 2021) defined support as teachers and staff being available when needed, creating a climate that is supportive and willing to assist students. An authoritative school climate associates a disciplined approach with a responsive style where efforts are shared to achieve trusting relationships with students, with a desire to reach challenging academic goals through transparent rules (Keppens & Spruyt, 2019).

Conclusion

This chapter presented a review of relevant literature relating to the purpose of this study, which was to examine the relationship between school climate and student achievement. The following chapter will describe the methodology to be used by the researcher during the current study. Chapter III will include the operationalization of theoretical constructs, an overview of the research problem, research purpose and questions, research design, population and sampling selection, instrumentation, data collection procedures, data analysis techniques, privacy and ethical considerations, and limitations for this study.

CHAPTER III:

METHODOLOGY

The purpose of this study was to examine the relationship between teachers' perceptions of school climate and student achievement among middle school students. This mixed methods study collected survey data from a purposeful sample of middle school teachers in Grades 6-8 within a large urban school district located in the Southwest region of the United States (US). Quantitative data, collected from the *New Jersey School Climate Survey* (NJSCS), were analyzed using Pearson's product-moment correlation (*r*). Data from the survey responses were analyzed using frequencies and percentages. Student achievement data were collected based on results from the reading and mathematics State of Texas Assessments of Academic Readiness (STAAR) assessments. Qualitative data were collected using an inductive coding process observing themes that arise from the participants' interviews. This chapter presents an overview of the research problem, operationalization of theoretical constructs, research purpose and questions, research design, population and sampling selection, instrumentation to be used, data collection procedures, data analysis, privacy and ethical considerations, and the research design limitations of the study.

Overview of the Research Problem

School climate is a compound and multifaceted concept that has been measured and studied considerably as a catalyst for educational improvement (Wang & Degol, 2016). School climate reflects all stakeholders', including staff, students, and parents, experiences of school life socially, emotionally, and academically (Thapa et al., 2013). Understanding school climate and its relationship to student achievement across explicit domains can provide schools with needed information to reduce learning disparities, especially among economically disadvantaged students (Daily et al., 2019). According to

Cardillo (2013), school climate provides the critical framework within which effective educational and instructional strategies flourish. Several schools are battling with the No Child Left Behind heritage of standardized testing without focusing on factors that can influence social and emotional welfare (Walker, 2016). The National School Climate Standards set the context for increased student achievement, graduation rates, positive youth outcomes, and teacher satisfaction, while reiterating that educators must be held accountable for the quality of school climate (Ciccone & Freiberg, 2013). As expectations around student achievement increases, school leaders and teachers may need to implement a school climate which encourages student achievement (Barksdale, 2017).

Operationalization of Theoretical Constructs

This study consisted of two constructs: (a) school climate and (b) student achievement. School climate is defined as an aggregate measure of a school's characteristics, including the shared beliefs, values, and attitudes that accommodate relationships between students, teachers, and principals and the physical attributes of the school environment (Adeogun & Olisaemeka, 2011; Hadiyanto, 2018). This construct was measured using the *New Jersey School Climate Survey* (NJSCS). Student achievement is defined as students acquiring the knowledge and skills and attitudes that will prepare them to lead successful lives (Education Evolving, 2016). Student achievement was measured by how well students achieved on the reading and mathematics *State of Texas Assessments of Academic Readiness* (STAAR) exam (TEA, 2012).

Research Purpose, Questions, and Hypotheses

The purpose of this study was to examine the relationship between teachers' perceptions of school climate and student achievement of middle-school students. The following research questions guided this study:

R1: Is there a relationship between administration support and student achievement?

Ha: There is a relationship between administration support and student achievement.

R2: Is there a relationship between building relationships and student achievement?

Ha: There is a relationship between building relationships and student achievement.

R3: Is there a relationship between teaching and learning and student achievement?

Ha: There is a relationship between teaching and learning and student achievement.

R4: Is there a relationship between school safety and student achievement?

Ha: There is a relationship between school safety and student achievement.

R5: What are teachers' perceptions of school climate factors that influence student achievement?

Research Design

For this study, the researcher used a sequential mixed-methods design (QUAN—qual). This design consisted of two phases: first, a quantitative phase and second, a qualitative phase. The advantage of implementing this design is it allowed for a more thorough and in-depth exploration of the quantitative results by following up with a qualitative phase. A purposeful sample of sixth through eighth grade teachers from a large urban school district located in the Southwest region of the US were solicited to complete the New Jersey School Climate Survey (NJSCS), which assesses the perceived

climate factors of teachers in the school environment. Archival data were used from the State of Texas Assessments of Academic Readiness (STAAR) to determine student achievement in the schools where teachers are employed. In addition, interviews were conducted with participants to provide a deeper analysis of how teachers perceive school climate and its influence on student achievement. Quantitative data were analyzed using Pearson's r, while qualitative data were analyzed using an inductive coding process.

Population and Sample

The population of this study consisted of a large urban school district in the Southwestern region of the US. The participating school district is one of the largest public-school systems in the nation and serves over 196,000 students. This district has 276 schools (eight early childhood, 160 elementary schools, 39 middle schools, 37 high schools, and 32 combined schools). Table 3.1 provides the student demographic data of the participating school district obtained from the 2020-2021 Facts and Figures report (TEA, 2021). The largest populations consist of Hispanics (61.8%) and African Americans (22.4%), with a large majority of the students being economically disadvantaged (78%).

Table 3.1

District Student Demographic Data

	Frequency (n)	Percentage (%)
1. Race/Ethnicity		
African American	44,123	22.4
American Indian	345	0.2
Asian	8,660	4.4
Hispanic	121,786	61.8
Pacific Islander	138	0.1
White	19,035	9.7
Two or More Races	2,856	1.5
2. Students by Program		
Economically Disadvantaged	154,511	78.5
At-Risk	103,805	52.7
Special Education	16,238	8.3
Limited English Proficient	65,638	33.3
English as a Second Language	29,439	15.0
Bilingual	35,118	17.8
Gifted/Talented	31,472	16.0

The participating school district has a total of 11,621 teachers. A purposeful sample of middle school teachers (sixth through eighth grade) were solicited to participate in this study. Table 3.2 displays the teacher demographics for the district and shows the gender, ethnicity, and teachers by years of experience obtained from the 2019-2020 Texas Academic Performance Report (TEA, 2021). The majority of the teachers in the district are African American (36%), Hispanic (30%), and White (26.4%). The largest percentage of teachers in the district have between 1 and 5 years teaching experience (31.4%), while the second largest percentage of teachers in the district have between 11 and 20 years teaching experience (26.6%).

Table 3.2

District Teacher Demographic Data

	Frequency (n)	
1. Gender		
Male	3,017	26.7
Female	8,267	73.3
2. Race/Ethnicity		
African American	4,060	36.0
American Indian	32	0.3
Asian	647	5.7
Hispanic	3,384	30.0
Pacific Islander	14	0.1
White	2,978	26.4
Two or More Races	168	1.5
3. Years of Experience		
Beginning Teachers	967	8.6
1-5 Years	3,544	31.4
6-10 Years	1,987	17.6
11-20 Years	3,006	26.6
Over 20 Years	1,780	15.8

Participant Selection

Selected middle schools in the large urban school district provided participants for the interviews. The designated district provided a proportional number of teachers to be selected to represent the population. Participants were selected based on years of experience, race/ethnicity, gender, and the grade levels for which they serve. Emails were sent petitioning their participation in the interviews. Once the participants were selected, 10 interviews were scheduled and completed in the spring of 2022.

Instrumentation

New Jersey School Climate Survey

The New Jersey School Climate Survey (NJSCS) was developed in 2012 by the New Jersey Department of Education (NJDOE), in collaboration with the Bloustein

Center for Survey Research (BCSR) at Rutgers, The State University of New Jersey (State of New Jersey, 2014). The BCSR assisted in the creation of questionnaires for four survey populations including elementary school students, middle and high school students, parents, and school staff. The questionnaire measured various dimensions of school climate for each of the four survey populations. The NJDOE retained survey experts from BCSR to verify the empirical propriety and effectiveness of each domain scale item to determine whether (a) that item should be kept for that domain scale, (b) reassigned to another domain scale, or (c) could be omitted from the survey without losing empirical purchase. This evaluation informed enhancements and revisions to the New Jersey School Climate Survey.

In 2014, after the NJDOE conducted a pilot test with selected districts across the state, the BCSR conducted a reliability and validity study and used the results to improve upon the 2012 survey instruments. The revised NJSCS included four validated questionnaires to support school climate improvement activities, as an integral part of their improvement efforts. BCSR conducted confirmatory factor analyses via structural equation modeling of each domain for each population in which the survey was administered. A total of 51,853 sets of survey responses were factor analyzed: elementary school (7,778 student responses collected from 44 schools); middle school (15,189 student responses collected from 80 schools); high school (17,117 student responses collected from 77 schools); parents (4,757 responses collected from 60 schools); and school staff members (7,012 responses collected from 97 schools). The assessment of each domain scale's performance was based on three goodness-of-fit (GOF) measures: explanatory validity—the coefficient of determination (CD); predictive validity—the standardized root mean squared residual (SRMR); and comparative model fit—the Tucker-Lewis Index (TLI).

The 57-item survey encompasses eight staff domains including (a) physical environment, (b) teaching and learning, (c) morale in the school community, (d) relationships, (e) parental support and engagement, (f) safety, (g) emotional environment, and (h) administration support. Participants were asked to express their level of agreement or disagreement related to school climate statements using a 5-point Likert-type scale (1=Strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree, and 5=Strongly Agree). Composite scores for each subscale ranges from 4-33. The greater the score, the more a teacher perceives the school climate to be influential to a student's learning. Cronbach's alphas were calculated to measure internal consistency/reliability: (a) administration support (.95), (b) relationships (.81), (c) teaching and learning (.80), (d) safety (.89), (e) physical environment (.72), (f) morale in school (.78), (g) parental support and engagement (.81), and (h) emotional environment (.79).

For the purpose of this study, the NJSCS will be simplified to accommodate middle school teachers. In order to minimize exhaustion and maximize participation, the NJSCS will only contain four of the original domains: (a) Administration Support, (b) Relationships, (c) Teaching and Learning, and (d) Safety. Table 3.3 displays a detailed description of each subscale that will be included in this study. Table 3.4 provides reliabilities for the subscales that will be included in this study.

Table 3.3Description and Number of Items for Each NJSCS Subscale

Scale	Scaled Description	Number of Items
1. Administration Support	Commitments, communication, and awareness	10
2. Relationships	Interactions and collaboration	9
3. Teaching and Learning	Encouragement, resources, and relationships with students	10
4. Safety	Outside, hallways, bathrooms, and classrooms	4

(Vogt & Johnson, 2011)

Table 3.4 *Reliabilities of NJSCS Scales*

	Items	Alpha Coefficients
1. Administration Support	10	0.95
2. Relationships	9	0.81
3. Teaching and Learning	10	0.80
4. Safety	4	0.89

State of Texas Assessments of Academic Readiness (STAAR) Test

The State of Texas Assessments of Academic Readiness, or STAAR, is the state's assessment program that was implemented during the 2011-2012 school year (TEA, 2018). All public-school students in Grades 3-12 take the STAAR tests. The assessments are based on state curriculum standards in core subjects including reading, mathematics, science, and social studies. The State of Texas Assessments of Academic Readiness (STAAR) is designed to measure the extent to which students have learned

and are able to apply the knowledge and skills defined in the state-mandated curriculum standards, the Texas Essential Knowledge and Skills (TEKS). Every question is directly aligned to the TEKS currently employed for the grade/subject or course being evaluated. Reliability for the STAAR test is estimated using statistical measures in areas such as internal consistency, conditional standard error of measurement, classical standard error of measurement, and classification accuracy. Required STAAR tests are given for mathematics and reading in Grades 3-8, science in Grades 5 and 8, and social studies in Grade 8. STAAR end-of-course assessments are required for high school graduation and include Algebra I, Biology, English I, English II, and US History.

The reading STAAR test is given to students in Grades 3-8. The sixth through eighth grade reading STAAR test has three reporting categories: (a) understanding across genres, (b) understanding/analysis of literary texts, and (c) understanding/analysis of informational texts. The assessments have a different number of questions for each reporting category, with most questions represented in understanding and analysis of literary and informational texts. The sixth-grade test has 40 multiple choice questions, seventh grade has 42 multiple choice questions, and eighth grade has 44 multiple choice questions.

The mathematics STAAR test is given to students in Grades 3-8. The sixth through eighth grade mathematics STAAR test has four reporting categories: (a) numerical representations and relationships, (b) computations and algebraic relationships, (c) geometry and measurement, and (d) data analysis and personal financial literacy. The assessments have a different number of questions for each reporting category, with most questions represented in computations and algebraic thinking and numerical representations and relationships. The sixth-grade test has 34 multiple choice questions and four griddables for a total of 38 problems. The seventh-grade test has 36 multiple

choice questions and four griddables for a total of 40. The eighth-grade assessment has 38 multiple choice questions and four griddables for a total of 42 math problems.

Data Collection Procedures

Quantitative

Prior to data collection, the researcher gained approval from the University of Houston-Clear Lake's (UHCL's) Committee for the Protection of Human Subjects (CPHS) and the participating school district's Institutional Review Board (IRB). After permission was granted, the researcher solicited the names and email addresses of all the middle school teachers from the research and accountability department within the participating school district. Teachers were sent an email soliciting participation in the study.

The email invitation included a survey cover letter that explained the purpose of the study and informed that completion of the survey was strictly voluntary. An informed consent explaining the details of the study was given to each participant prior to the administration of the survey. The researcher disseminated a survey link encompassing access to the NJCSC using SurveyMonkey, the timeline for completion, and instructions regarding the data collection process. The survey responses were collected over a 4-week period. Follow-up emails were sent to teachers each week of the data collection period. Once survey responses were received, the data were entered into quantitative research software Statistical Package for the Social Sciences (SPSS) for further analysis.

The name of the school district in which the study was conducted will not be identified. The researcher will maintain collected data on a password-protected computer and within a locked file cabinet in the researcher's office for a period of 5 years, which is

the time required by CPHS and district guidelines. After the deadline has passed, all data files associated with this study will be destroyed.

Qualitative

Teachers' perceptions of school climate factors that influence student achievement was further analyzed using an interview protocol. Participants were solicited to participate in a 30-minute, semistructured interview. Similar questions were asked of all participants, and the questions were worded to allow participants to expound upon their answers and experiences. The interview questions were designed by the researcher and assessed by peers to look for alignment areas to support the validity of the study. The interview protocol was piloted in Spring 2022 with a group of middle school teachers. Emails were sent out to teachers in the middle schools served by the district. To obtain a sample representing the population, demographics such as race, gender, level, and experience were considered. The email requested participation in an interview, discussed the purpose of the research, procedures, and included the actual interview questions.

The interviews were conducted with teachers who agreed to be participants in the study. A consent form was signed by participants prior to the interview. The interviewees participated in virtual and in-person interviews. The interview protocol responded to 13 items about perceived school climate factors that influence student achievement. The interviews lasted approximately 25-30 minutes each. The sessions were audio recorded, transcribed, and coded for themes. Pseudonyms were used to protect the identity of participants involved in the study.

Data Analysis

Quantitative Analysis

To answer Research Questions 1-4, a Pearson's product moment correlation (r) was conducted to determine if there is a relationship between school climate factors (administration support, relationships, teaching and learning, and safety) and student achievement in mathematics and reading. Effect size was measured using the coefficient of determination (r2) and a significance value of .05 was used for this study. All variables were continuous in measurement. Student achievement was measured using the overall percent of students meeting the standard at the "approaches grade level" and above for the STAAR reading and mathematics assessments for each teacher's campus.

Qualitative Analysis

Succeeding the analysis of the quantitative data, the findings were employed to authenticate the interview questions in an attempt to provide a more thorough understanding of the relationship between school climate and student achievement. To answer Research Question 5, data from the interviews were collected and analyzed using thematic analysis. Following transcription, interviews were color-coded using highlighters to classify patterns and emergent themes. Obtaining additional data allowed the researcher to further study the constructs in more detail. The open-ended questions provided a better understanding of the overall pattern emerging from the quantitative portion of the study. After all responses within the interview transcript were coded, the codes were organized into larger groups of themes. Themes and patterns from the data were placed into categories, and the findings were documented. This provided additional data to determine if there is a relationship between school climate and student achievement.

Qualitative Validity

The mixed methods design strengthened the validity of the study by triangulating data across the quantitative and qualitative designs. For the qualitative portion, interview responses were organized into themes. Quoting participants during the data collection process enhances the validity of the study by reducing probable bias. Member checking was used during the coding of the interviews to ensure the voices of the participants were precisely taken, and therefore increased the validity of the findings. Triangulation of themes from the interviews provided a detailed description of the findings. To increase the validity, questions and results were peer reviewed by skilled educators in order to ensure questions were valid. The peer review served the purpose of obtaining feedback associated with questions asked of participants related to their perceptions of school climate factors that influence student achievement.

Privacy and Ethical Considerations

Prior to data collection, the researcher gained approval from UHCL and the participating school district's Institutional Review Board (IRB). After permission was granted, the researcher solicited the names and email addresses of all the middle school teachers from the research and accountability department within the participating school district. Teachers were sent an email soliciting participation in the study.

The email invitation included a survey cover letter that explained the purpose of the study and informed that completion of the survey was strictly voluntary. The researcher disseminated a survey link encompassing access to the NJCSC through the use of SurveyMonkey, the timeline for completion, and instructions regarding the data collection process. The survey responses were collected over a 4-week period. Follow-up emails were sent to teachers each week of the data collection period. Once survey

responses were received, the data were entered into quantitative research software for further analysis.

Similarly, participants in the qualitative portion of the study were provided information regarding the purpose of the study, approximately how long it would take, and that participation was voluntary via a written consent. Additionally, the researcher conveyed to interview participants that confidentiality would be maintained through the use of pseudonyms for those participating. Identifying information about participants was transformed, as needed, to further guard identities. Campus names were kept confidential as well by utilizing pseudonyms.

The name of the school district in which the study was conducted will not be identified. The researcher will maintain collected data on a password-protected computer for a period of 5 years, which is the time required by CPHS and district guidelines. After the deadline has passed, all data files associated with this study will be destroyed.

Research Design Limitations

This research design had several limitations. First, the study only focused on teachers at the middle school level. Given that the district is so large and encompasses schools at all levels, the responses from middle school teachers, based on their understandings, displayed limits. This potentially impacted the validity of the responses of participating teachers based on the assumption that their answers could affect the way their campus was viewed.

Second, survey responses regarding the selected school climate factors differed based on the years of experience of the teacher completing the survey. For beginning teachers, school morale, administrative support, and building relationships were very important features that influenced whether or not they would remain in the field of education. Teachers with more experience focused on relationships built over the years

and school safety. With their experience in the work, they have had more time to focus on other factors that impact school climate. Where teachers are in their careers affected how they responded to survey questions asked regarding the multiple school climate factors.

Third, although there are several middle schools in the participating district, some principals would not allow teacher participation based on the potential negative connotation that could materialize as a consequence of teachers partaking in the study. School leaders not familiar with school climate research, viewed the survey as undesirable and a way to upset morale on their campuses. Lack of participation, based on the size of the school district, could have limited the validity of the study's results.

Conclusion

The purpose of this study was to examine the relationship between teachers' perceptions of school climate and student achievement of middle school students. This chapter included a focus on the instrumentation that was utilized and the student achievement data that were considered. The information collected from the survey was analyzed, along with student achievement data and qualitative findings from the interviews, to determine if there is a relationship between school climate and student achievement. The results from this methodology are discussed in further detail in Chapter IV of this study.

CHAPTER IV:

RESULTS

The purpose of this study was to examine the relationship between teachers' perceptions of school climate and student achievement of middle school students. This chapter presents the findings of quantitative and qualitative data analyses of the study. First, an explanation of the participants' demographics of the study are presented, followed by results of the data analysis. This chapter presents the data analysis for each of the five research questions. It concludes with a summary of the findings.

Participant Demographics

Two hundred twenty middle school teachers participated in the survey. Forty-eight responses (22.0%) were removed as a result of missing data and not meeting requirements for participation in the study. Of the 220 participants, 172 (78.0%) were reading and math teachers thus qualifying to be included in the study. Table 4.1 provides participating teacher demographics. Years of teaching experience varied with most teachers (30.2%, n = 52) having 1-5 years of experience and 50 (29.1%) having 6-10 years' experience. The majority of the teachers who completed the survey were either African American (33.7%, n = 58) or White (32.6%, n = 56). Sixty-five teachers (37.8%) indicated they were male, while 107 (62.2%) indicated they were female. Age varied; however, 63 teachers (36.6%) were between the ages of 30-39 and 42 (24.4%) were between the ages of 40-49.

Table 4.1

Teacher Participant Demographic Data (Survey)

	Frequency (n)	Percentage (%)
1. Subject Area		
Total Teachers	172	100.0
Reading	84	48.8
Math	88	51.2
2. Grade Level		
6 th	52	30.2
$7^{ ext{th}}$	56	32.6
$8^{ ext{th}}$	57	33.1
Multi-Grade	7	4.1
3. Teaching Experience		
1-5 Years	52	30.2
6-10 Years	50	29.1
11-20 Years	41	23.8
Over 20 Years	29	16.9
4. Ethnicity		
African American	58	33.7
Asian	21	12.2
Hispanic/Latino	28	16.3
Native American	1	0.6
White	56	32.6
Other	8	4.6
5. Gender		
Male	65	37.8
Female	107	62.2
6. Age		
20-29	28	16.3
30-39	63	36.6
40-49	42	24.4
50-59	28	16.3
60 or Older	11	6.4

Ten middle school teachers participated in the interview. Table 4.2 provides participating teacher demographics for the interviewees. Of the 10 interviewees, five (50.0%) were reading teachers and five (50.0%) were math teachers thus qualifying to be included in the study. Half of the teachers interviewed taught eighth grade (50.0%, n = 5). Years of teaching experience varied with most teachers having 6-10 years of experience (40.0%, n = 4) or having 11-20 years' experience (40.0%, n = 4). The majority of the teachers who completed the survey were either Asian (50.0%, n = 5) or African American (40.0%, n = 4). Four teachers (40.0%) indicated they were male, while six (60.0%) indicated they were female. Age varied; however, four teachers (40.0%) were between the ages of 50-59.

Table 4.2Teacher Participant Demographic Data (Interviews)

	Frequency (n)	Percentage (%)
1. Subject Area		
Total Teachers	10	100.0
Reading	5	50.0
Math	5	50.0
2. Grade Level		
$6^{ ext{th}}$	1	10.0
7^{th}	2	20.0
8 th	5	50.0
Multi-Grade	2	20.0
3. Teaching Experience		
1-5 Years	1	10.0
6-10 Years	4	40.0
11-20 Years	4	40.0
Over 20 Years	1	10.0
4. Race/Ethnicity		
African American	4	40.0
Asian	5	50.0
Hispanic/Latino	1	10.0
Native American	0	0.0
White	0	0.0
Other	0	0.0
5. Gender		
Male	4	40.0
Female	6	60.0
6. Age		
20-29	1	10.0
30-39	4	40.0
40-49	1	10.0
50-59	4	40.0
60 or Older	0	0.0

Research Question 1

Research Question 1, *Is there a relationship between administration support and student achievement?*, was answered using frequencies, percentages, and Pearson's product-moment correlation (r). Results of the Pearson's product-moment correlation (r) indicated there was not a statistically significant relationship between administration support and students' STAAR reading scores, r = .044, p = .690, and STAAR math scores, r = -.131, p = .224. The survey questionnaire related to administration support included 10-items using a 4-point Likert-type scale (1 = Strongly Disagree, 2 = Disagree, 3 = Agree, 4 = Strongly Agree). The responses related to administration support factors that influence student achievement are provided below. Table 4.3 provides expanded responses to administration support for all participants, and Table 4.4 provides collapsed responses to administration support for all participants.

Reading Teachers

Reading teachers (79.8%) *Agreed/Strongly Agreed* that school administrators give useful feedback on their teaching, recognize teachers for a job well done (78.3%), communicate effectively with others from diverse backgrounds (82.2%), follow through on commitments (73.8%), and involve teachers in decision making and problem solving (62.7%). Additionally, reading teachers (70.3%) *Agreed/Strongly Agreed* that school administrators and staff communicate with each other effectively, promote the success of all students (85.7%), hold themselves to the same high expectations as others (75.0%), back them up when they need it (78.6%), and are aware of what goes on in the classrooms (66.3%). While most reading teachers agreed that school administrators provide support, (37.3%) *Disagreed/Strongly Disagreed* that they provide support, and (33.7%) indicated that administrators are not aware of what goes on in the classrooms.

Math Teachers

Math teachers (78.4%) *Agreed/Strongly Agreed* that school administrators give useful feedback on their teaching, recognize teachers for a job well done (71.6%), communicate effectively with others from diverse backgrounds (75.0%), follow through on commitments (67.1%), and involve teachers in decision-making and problem-solving (61.3%). Additionally, math teachers (65.9%) *Agreed/Strongly Agreed* that school administrators and staff communicate with each other effectively, promote the success of all students (77.3%), hold themselves to the same high expectations as others (70.4%), back them up when they need it (80.7%), and are aware of what goes on in the classrooms (72.8%). While most math teachers agreed that school administrators provide support, (33.0%) *Disagreed/Strongly Disagreed* that they follow through on commitments, involve teachers in decision-making and problem-solving (38.7%), and that they communicate with staff and each other effectively (34.1%).

Total Teacher Comparison

Overall, reading and math teachers (81.4%) both *Agreed/Strongly Agreed* that school administrators promote the success of all students, back them up when needed (79.7%), give useful feedback on their teaching (79.1%), and communicate effectively with others from diverse backgrounds (78.5%). Overall, the percentage of reading teachers (75.3%) agreeing/strongly agreeing that administrators provide support was higher than that of math teachers (72.1%). Reading teachers' percentages were higher than math teachers' in every category except administrators back me up when needed (80.7%) from math teachers compared to (78.6%) from reading teachers and administrators being aware of what goes on in the classrooms (72.8%) from math teachers compared to (66.3%) from reading teachers.

Table 4.3

Expanded Responses to Administration Support for all Participants (%)

Survey	7 Item	Subject	Strongly Disagree	Disagree	Agree	Strongly Agree
1.	School	Reading	4.8	15.5	51.2	28.6
	administrators give		(n = 4)	(n = 13)	(n = 43)	(n = 24)
	me useful feedback	Math	11.4	10.2	62.5	15.9
	on my teaching.		(n = 10)	(n = 9)	(n = 55)	(n = 14)
		All	8.1	12.8	57.0	22.1
			(n = 14)	(n = 22)	(n = 98)	(n = 38)
2.	School	Reading	9.6	12.0	53.0	25.3
	administrators		(n = 8)	(n = 10)	(n = 44)	(n = 21)
	recognize teachers	Math	10.2	18.2	53.4	18.2
	for a job well done.		(n = 9)	(n = 16)	(n = 47)	(n = 16)
		All	9.9	15.2	53.2	21.6
			(n = 17)	(n = 26)	(n = 91)	(n = 37)
3.	School	Reading	8.3	9.5	64.3	17.9
	administrators		(n = 7)	(n = 8)	(n = 54)	(n = 15)
	communicate	Math	8.0	17.0	54.5	20.5
	effectively with		(n = 7)	(n = 15)	(n = 48)	(n = 18)
	others from diverse	All	8.1	13.4	59.3	19.2
	backgrounds.		(n = 14)	(n = 23)	(n = 102)	(n = 33)
4.	School	Reading	10.7	15.5	52.4	21.4
	administrators		(n = 9)	(n = 13)	(n = 44)	(n = 18)
	follow through on	Math	9.1	23.9	52.3	14.8
	commitments.		(n = 8)	(n = 21)	(n = 46)	(n = 13)
		All	9.9	19.8	52.3	18.0
			(n = 17)	(n = 34)	(n = 90)	(n = 31)
5.	School	Reading	10.8	26.5	43.4	19.3
	administrators		(n = 9)	(n = 22)	(n = 36)	(n = 16)
	involve teachers in	Math	14.8	23.9	44.3	17.0
	decision-making		(n = 13)	(n = 21)	(n = 39)	(n = 15)
	and problem-	All	12.9	25.1	43.9	18.1
	solving.		(n = 22)	(n = 43)	(n = 75)	(n = 31)

6.	School	Reading	7.1	22.6	52.4	17.9
	administrators and		(n = 6)	(n = 19)	(n = 44)	(n = 15)
	staff communicate	Math	12.5	21.6	52.3	13.6
	with each other		(n = 11)	(n = 19)	(n = 46)	(n = 12)
	effectively.	All	9.9	22.1	52.3	15.7
			(n = 17)	(n = 38)	(n = 90)	(n = 27)
7.	School	Reading	3.6	10.7	57.1	28.6
	administrators		(n = 3)	(n = 9)	(n = 48)	(n = 24)
	promote the success	Math	4.5	18.2	58.0	19.3
	of all students.		(n = 4)	(n = 16)	(n = 51)	(n = 17)
		All	4.1	14.5	57.6	23.8
			(n = 7)	(n = 25)	(n = 99)	(n = 41)
8.	School	Reading	10.7	14.3	52.4	22.6
	administrators hold		(n = 9)	(n = 12)	(n = 44)	(n = 19)
	themselves to the	Math	11.4	18.2	53.4	17.0
	same high		(n = 10)	(n = 16)	(n = 47)	(n = 15)
	expectations as	All	11.0	16.3	52.9	19.8
	others.		(n = 19)	(n = 28)	(n = 91)	(n = 34)
9.	School	Reading	7.1	14.3	48.8	29.8
	administrators back		(n = 6)	(n = 12)	(n = 41)	(n = 25)
	me up when I need	Math	9.1	10.2	60.2	20.5
	it.		(n = 8)	(n = 9)	(n = 53)	(n = 18)
		All	8.1	12.2	54.7	25.0
			(n = 14)	(n = 21)	(n = 94)	(n = 43)
10.	School	Reading	8.4	25.3	45.8	20.5
	administrators are	C	(n = 7)	(n = 21)	(n = 38)	(n = 17)
	aware of what goes	Math	13.6	13.6	61.4	11.4
	on in the		(n = 12)	(n = 12)	(n = 54)	(n = 10)
	classrooms.	All	11.1	19.3	53.8	15.8
			(n = 19)	(n = 33)	(n = 92)	(n = 27)

Table 4.4

Collapsed Responses to Administration Support for all Participants (%)

	Survey Item	Subject	Strongly	Agree/Strongly
			Disagree/Disagree	Agree
1.	School	Reading	20.3	79.8
	administrators give		(n = 17)	(n = 67)
	me useful feedback	Math	21.6	78.4
	on my teaching.		(n = 19)	(n = 69)
		All	20.9	79.1
			(n = 36)	(n = 136)
2.	School	Reading	21.6	78.3
	administrators	_	(n = 18)	(n = 65)
	recognize teachers	Math	28.4	71.6
	for a job well done.		(n = 25)	(n = 63)
	· ·	All	25.1	74.8
			(n = 43)	(n = 128)
3.	School	Reading	17.8	82.2
	administrators	C	(n = 15)	(n = 68)
	communicate	Math	25.0	75.0
	effectively with		(n = 22)	(n = 66)
	others from diverse	All	21.5	78.5
	backgrounds.		(n = 37)	(n = 135)
4.	School	Reading	26.2	73.8
	administrators	C	(n = 22)	(n = 62)
	follow through on	Math	33.0	67.1
	commitments.		(n = 29)	(n = 59)
		All	29.7	70.3
			(n = 51)	(n = 121)
5.	School	Reading	37.3	62.7
	administrators	2	(n = 31)	(n = 52)
	involve teachers in	Math	38.7	61.3
	decision-making and		(n = 34)	(n = 54)
	problem-solving.	All	38.0	62.0
	-		(n = 65)	(n = 106)

6.	School	Reading	29.7	70.3
0.	administrators and	Reading	(n = 25)	(n = 59)
	staff communicate	Math	34.1	65.9
	with each other	Maui	(n = 30)	(n = 58)
	effectively.	All	32.0	68.0
	circuively.	AII	(n = 55)	(n = 117)
			$(\Pi - 33)$	(II – 117)
7.	School	Reading	14.3	85.7
	administrators	_	(n = 12)	(n = 72)
	promote the success	Math	22.7	77.3
	of all students.		(n = 20)	(n = 68)
		All	18.6	81.4
			(n = 32)	(n = 140)
8.	School	Reading	25.0	75.0
	administrators hold		(n = 21)	(n = 63)
	themselves to the	Math	29.6	70.4
	same high		(n = 26)	(n = 62)
	expectations as	All	27.3	72.7
	others.		(n = 47)	(n = 125)
9.	School	Reading	21.4	78.6
	administrators back	O	(n = 18)	(n = 66)
	me up when I need	Math	19.3	80.7
	it.		(n = 17)	(n = 71)
		All	20.3	79.7
			(n = 35)	(n = 137)
10	. School	Reading	33.7	66.3
10	administrators are	Reading	(n = 28)	(n = 55)
	aware of what goes	Math	(11 - 26) 27.2	72.8
	on in the classrooms.	iviatii	(n = 24)	(n = 64)
	on in the classiounis.	All	(11 - 24) 30.4	(II = 04) 69.6
		AII		
			(n = 52)	(n = 119)

Research Question 2

Research Question 2, *Is there a relationship between building relationships and student achievement?*, was answered using frequencies, percentages, and Pearson's product-moment correlation (r). Results of the Pearson's product-moment correlation (r) indicated there was not a statistically significant relationship between building relationships and students' STAAR reading scores, r = -.022, p = .841, and STAAR math scores, r = -.135, p = .209. The survey questionnaire related to building relationships included 9 items using a 4-point Likert-type scale (1 = Strongly Disagree, 2 = Disagree, 3 = Agree, 4 = Strongly Agree). The responses related to building relationships factors that influence student achievement are provided below. Table 4.5 provides expanded responses to building relationships for all participants, and Table 4.6 provides collapsed responses to building relationships for all participants.

Reading Teachers

Reading teachers (79.3%) *Agreed/Strongly Agreed* that teachers are treated and respected as educational professionals, it is common for students to tease and insult one another (63.1%), parents respect their children's teachers (81.0%), and adults in the school treat each other with respect (89.2%). Additionally, reading teachers (81.7%) *Agreed/Strongly Agreed* that adults in the school typically work well with one another, that students respect their teachers (71.0%), that students respect each other's differences (73.8%), and that school staff respects and embraces diversity (86.9%). Reading teachers agreed that relationships are built in their schools, and 63.1% *Disagreed/Strongly Disagreed* that students go out of their way to treat other students badly.

Math Teachers

Math teachers (73.5%) *Agreed/Strongly Agreed* that teachers are treated and respected as educational professionals, it is common for students to tease and insult one

another (60.2%), parents respect their children's teachers (67.8%), and adults in the school treat each other with respect (88.5%). Additionally, math teachers (87.3%) *Agreed/Strongly Agreed* that adults in the school typically work well with one another, that students respect their teachers (65.1%), that students respect each other's differences (69.3%), and that school staff respects and embraces diversity (84.0%). Math teachers agreed that relationships are built in their schools, and 68.6% *Disagreed/Strongly Disagreed* that students go out of their way to treat other students badly.

Total Teacher Comparison

Overall, reading and math teachers (76.3%) *Agreed/Strongly Agreed* that teachers are treated and respected as educational professionals, it is common for students to tease and insult one another (61.6%), parents respect their children's teachers (74.3%), and adults in the school treat each other with respect (88.9%). Additionally, reading and math teachers (84.6%) *Agreed/Strongly Agreed* that adults in the school typically work well with one another, that students respect their teachers (68.0%), that students respect each other's differences (71.6%), and that school staff respects and embraces diversity (85.5%). Reading and math teachers both agree that relationships are built in their schools, and 65.9% *Disagreed/Strongly Disagreed* that students go out of their way to treat other students badly. The largest difference in percentage with reading teachers (81.0%) and math teachers (67.8%) was with parents respecting their children's teachers.

Table 4.5

Expanded Responses to Building Relationships for all Participants (%)

Survey	/ Item	Subject	Strongly Disagree	Disagree	Agree	Strongly Agree
1.	At this school,	Reading	6.1	14.6	56.1	23.2
	teachers are treated	C	(n = 5)	(n = 12)	(n = 46)	(n = 19)
	and respected as	Math	9.2	17.2	54.0	19.5
	educational		(n = 8)	(n = 15)	(n = 47)	(n = 17)
	professionals.	All	7.7	16.0	55.0	21.3
			(n = 13)	(n = 27)	(n = 93)	(n = 36)
2.	At this school, it is	Reading	11.9	25.0	41.7	21.4
	common for		(n = 10)	(n = 21)	(n = 35)	(n = 18)
	students to tease	Math	9.1	30.7	46.6	13.6
	and insult one		(n = 8)	(n = 27)	(n = 41)	(n = 12)
	another.	All	10.5	27.9	44.2	17.4
			(n = 18)	(n = 48)	(n = 76)	(n = 30)
3.	Parents respect	Reading	7.1	11.9	63.1	17.9
	their children's	_	(n = 6)	(n = 10)	(n = 53)	(n = 15)
	teachers.	Math	10.3	21.8	59.8	8.0
			(n = 9)	(n = 19)	(n = 52)	(n = 7)
		All	8.8	17.0	61.4	12.9
			(n = 15)	(n = 29)	(n = 105)	(n = 22)
4.	Adults who work in	Reading	1.2	9.5	69.0	20.2
	this school treat		(n = 1)	(n = 8)	(n = 58)	(n = 17)
	students with	Math	3.4	8.0	75.9	12.6
	respect.		(n = 3)	(n = 7)	(n = 66)	(n = 11)
		All	2.3	8.8	72.5	16.4
			(n=4)	(n = 15)	(n = 124)	(n = 28)
5.	Adults who work in	Reading	3.7	14.6	58.5	23.2
	this school typically		(n = 3)	(n = 12)	(n = 48)	(n = 19)
	work well with one	Math	2.3	10.3	72.4	14.9
	another.		(n = 2)	(n = 9)	(n = 63)	(n = 13)
		All	3.0	12.4	65.7	18.9
			(n=5)	(n = 21)	(n = 111)	(n = 32)

6.	Many students at	Reading	15.5	47.6	28.6	8.3
	this school go out		(n = 13)	(n = 40)	(n = 24)	(n = 7)
	of their way to treat	Math	15.1	53.5	25.6	5.8
	other students		(n = 13)	(n = 46)	(n = 22)	(n = 5)
	badly.	All	15.3	50.6	27.1	7.1
			(n = 26)	(n = 86)	(n = 46)	(n = 12)
7.	Students respect	Reading	8.4	20.5	60.2	10.8
/ •	their teachers.	Reading	(n = 7)	(n = 17)	(n = 50)	(n = 9)
	then teachers.	Math	9.3	25.6	61.6	3.5
		Matii	(n = 8)	(n = 22)	(n = 53)	(n = 3)
		All	8.9	(11 - 22) 23.1	60.9	(n - 3) 7.1
		All	(n = 15)	(n = 39)	(n = 103)	(n = 12)
			(11 15)	(n 3))	(11 100)	(11 12)
8.	Students in this	Reading	7.1	19.0	65.5	8.3
	school respect each	C	(n = 6)	(n = 16)	(n = 55)	(n = 7)
	other's differences	Math	8.0	22.7	62.5	6.8
	(for example,		(n = 7)	(n = 20)	(n = 55)	(n = 6)
	gender, race,	All	7.6	20.9	64.0	7.6
	culture, etc.)		(n = 13)	(n = 36)	(n = 110)	(n = 13)
g	This school staff	Reading	2.4	10.7	60.7	26.2
7.	respects and	Reading	(n = 2)	(n = 9)	(n = 51)	(n = 22)
	embraces diversity.	Math	$\frac{(n-2)}{2.3}$	13.6	67.0	17.0
	emoraces diversity.	Watti	(n = 2)	(n = 12)	(n = 59)	(n = 15)
		All	$\frac{(n-2)}{2.3}$	12.2	64.0	21.5
		7 111	(n = 4)	(n = 21)	(n = 110)	(n = 37)
			(')	(21)	(110)	(0,)

Table 4.6

Collapsed Responses to Building Relationships for all Participants (%)

	Survey Item	Subject	Strongly	Agree/Strongly
			Disagree/Disagree	Agree
1.	At this school, teachers are treated	Reading	20.7	79.3
			(n = 17)	(n = 65)
	and respected as educational professionals.	Math	26.4	73.5
			(n = 23)	(n = 64)
		All	23.7	76.3
			(n = 40)	(n = 129)
2.	At this school, it is common for students	Reading	36.9	63.1
		C	(n = 31)	(n = 53)
	to tease and insult one another.	Math	39.8	60.2
			(n = 35)	(n = 53)
		All	38.4	61.6
			(n = 66)	(n = 106)
3.	Parents respect their children's teachers.	Reading	19.0	81.0
		C	(n = 16)	(n = 68)
		Math	32.1	67.8
			(n = 22)	(n = 59)
		All	25.8	74.3
			(n = 44)	(n = 127)
4.	Adults who work in this school treat	Reading	10.7	89.2
		_	(n = 9)	(n = 75)
	students with respect.	Math	11.4	88.5
			(n = 10)	(n = 77)
		All	11.1	88.9
			(n = 19)	(n = 152)
5.	Adults who work in this school typically	Reading	18.3	81.7
		-	(n = 15)	(n = 67)
	work well with one	Math	12.6	87.3
	another.		(n = 34)	(n = 76)
		All	15.4	84.6
			(n = 26)	(n = 143)

6.	Many students at	Reading	63.1	36.9
	this school go out of		(n = 53)	(n = 31)
	their way to treat	Math	68.6	31.4
	other students badly.		(n = 59)	(n = 27)
		All	65.9	34.1
			(n = 112)	(n = 58)
7.	Students respect	Reading	28.9	71.0
	their teachers.	_	(n = 24)	(n = 59)
		Math	34.9	65.1
			(n = 30)	(n = 56)
		All	32.0	68.0
			(n = 54)	(n = 115)
8.	Students in this	Reading	26.1	73.8
	school respect each	_	(n = 22)	(n = 62)
	other's differences	Math	30.7	69.3
	(for example,		(n = 27)	(n = 61)
	gender, race, culture,	All	28.5	71.6
	etc.)		(n = 49)	(n = 123)
9.	This school staff	Reading	13.1	86.9
	respects and	2	(n = 11)	(n = 73)
	embraces diversity.	Math	15.9	84.0
	·		(n = 14)	(n = 74)
		All	14.5	85.5
			(n = 25)	(n = 147)

Research Question 3

Research Question 3, *Is there a relationship between teaching and learning and student achievement?*, was answered using frequencies, percentages, and Pearson's product-moment correlation (r). Results of the Pearson's product-moment correlation (r) indicated there was not a statistically significant relationship between teaching and learning and students' STAAR reading scores, r = -.177, p = .106, and STAAR math scores, r = -.074, p = .496. The survey questionnaire related to teaching and learning included 10 items using a 4-point Likert-type scale (1 = Strongly Disagree, 2 = Disagree, 3 = Agree, 4 = Strongly Agree). The responses related to teaching and learning factors that influence student achievement are provided below. Table 4.7 provides expanded responses to teaching and learning for all participants, and Table 4.8 provides collapsed responses to teaching and learning for all participants.

Reading Teachers

Reading teachers (84.3%) *Agreed/Strongly Agreed* that the school community has high expectations of all students, students get to work independently (92.9%), students cannot be motivated to do the work (52.4%), and students are encouraged to think critically (89.3%). Additionally, reading teachers (83.1%) *Agreed/Strongly Agreed* that they have access to tools needed to do their job, the best teachers and staff are retained (63.1%), and that their school encourages students to get involved in extracurricular activities (78.6%). Most reading teachers agree that teaching and learning impacts school climate; however, 63.0% *Disagreed/Strongly Disagreed* that students do not care about learning, that they are dissatisfied with opportunities for their professional growth (63.1%), and that they do not have enough autonomy over their classrooms (67.9%).

Math Teachers

Math teachers (80.6%) *Agreed/Strongly Agreed* that the school community has high expectations of all students, students get to work independently (88.3%), students cannot be motivated to do the work (56.3%), and students are encouraged to think critically (80.6%). Additionally, math teachers (72.4%) *Agreed/Strongly Agreed* that they have access to tools needed to do their job, the best teachers and staff are retained (59.0%), and that their school encourages students to get involved in extracurricular activities (72.4%). Most math teachers agree that teaching and learning impacts school climate; however, 65.5% *Disagreed/Strongly Disagreed* that students do not care about learning, that they are dissatisfied with opportunities for their professional growth (63.2%), and that they do not have enough autonomy over their classroom (70.1%).

Total Teacher Comparison

Overall, reading and math teachers (82.5%) *Agreed/Strongly Agreed* that the school community has high expectations of all students, students get to work independently (90.6%), students cannot be motivated to do the work (54.4%), and students are encouraged to think critically (84.9%). Additionally, reading and math teachers (77.6%) *Agreed/Strongly Agreed* that they have access to tools needed to do their job, the best teachers and staff are retained (61.0%), and that their school encourages students to get involved in extracurricular activities (75.4%). Reading and math teachers agreed that teaching and learning impacts school climate; however, 64.3% *Disagreed/Strongly Disagreed* that students do not care about learning, that they are dissatisfied with opportunities for their professional growth (63.2%), and that they do not have enough autonomy over their classroom (69.0%).

Table 4.7

Expanded Responses to Teaching and Learning for all Participants (%)

Survey	7 Item	Subject	Strongly Disagree	Disagree	Agree	Strongly Agree
1.	Students at this	Reading	19.0	44.0	31.0	6.0
	school don't care		(n = 16)	(n = 37)	(n = 26)	(n = 5)
	about learning.	Math	18.4	47.1	27.6	6.9
			(n = 16)	(n = 41)	(n = 24)	(n = 6)
		All	18.7	45.6	29.2	6.4
			(n = 32)	(n = 78)	(n = 50)	(n = 11)
2.	The school	Reading	1.2	14.5	61.4	22.9
	community has		(n = 1)	(n = 12)	(n = 51)	(n = 19)
	high expectations	Math	4.5	14.8	63.6	17.0
	of all students.		(n = 4)	(n = 13)	(n = 56)	(n = 15)
		All	2.9	14.6	62.6	19.9
			(n=5)	(n = 25)	(n = 107)	(n = 34)
3.	Students at this	Reading	1.2	6.0	61.9	31.0
	school get the	C	(n = 1)	(n = 5)	(n = 52)	(n = 26)
	chance to work	Math	2.3	9.3	70.9	17.4
	independently.		(n = 2)	(n = 8)	(n = 61)	(n = 15)
	1	All	1.8	7.6	66.5	24.1
			(n = 3)	(n = 13)	(n = 113)	(n = 41)
4.	Some students at	Reading	14.3	33.3	39.3	13.1
	this school just	J	(n = 12)	(n = 28)	(n = 33)	(n = 11)
	cannot be	Math	2.3	41.4	44.8	11.5
	motivated to do the		(n = 2)	(n = 36)	(n = 39)	(n = 10)
	work.	All	8.2	37.4	42.1	12.3
			(n = 14)	(n = 64)	(n = 72)	(n = 21)
5.	Students at this	his Reading 2.4 8.3	8.3	65.5	23.8	
	school are		(n = 2)	(n = 7)	(n = 55)	(n = 20)
	encouraged to think	Math	1.1	18.2	67.0	13.6
	critically.		(n = 1)	(n = 16)	(n = 59)	(n = 12)
	•	All	1.7	13.4	66.3	18.6
			(n = 3)	(n = 23)	(n = 114)	(n = 32)

6.	I have access to the	Reading	3.6	13.3	60.2	22.9
	tools I need to do		(n = 3)	(n = 11)	(n = 50)	(n = 19)
	my job.	Math	12.6	14.9	58.6	13.8
			(n = 11)	(n = 13)	(n = 51)	(n = 12)
		All	8.2	14.1	59.4	18.2
			(n = 14)	(n = 24)	(n = 101)	(n = 31)
7	T 1' 4' 6' 1	D 1'	20.2	40.0	20.0	7.1
7.	I am dissatisfied	Reading	20.2	42.9	29.8	7.1
	with opportunities	3.6	(n = 17)	(n = 36)	(n = 25)	(n=6)
	for my professional	Math	12.6	50.6	25.3	11.5
	growth.		(n = 11)	(n = 44)	(n = 22)	(n = 10)
		All	16.4	46.8	27.5	9.4
			(n = 28)	(n = 80)	(n = 47)	(n = 16)
8.	The best teachers	Reading	13.1	23.8	51.2	11.9
٠.	and staff are	1174441115	(n = 11)	(n = 20)	(n = 43)	(n = 10)
	retained at this	Math	14.8	26.1	54.5	4.5
	school.	1114411	(n = 13)	(n = 23)	(n = 48)	(n=4)
	5011001.	All	14.0	25.0	52.9	8.1
		1 111	(n = 24)	(n = 43)	(n = 91)	(n = 14)
			$(\Pi - 2\pi)$	(II – 1 3)	(11 – 71)	(II – I <i>T)</i>
9.	I do not have	Reading	26.2	41.7	23.8	8.3
	enough autonomy	C	(n = 22)	(n = 35)	(n = 20)	(n = 7)
	over my classroom.	Math	17.2	52.9	21.8	8.0
	•		(n = 15)	(n = 46)	(n = 19)	(n = 7)
		All	21.6	47.4	22.8	8.2
			(n = 37)	(n = 81)	(n = 39)	(n = 14)
10	Th: 1	D 4"	2.4	10.0	40.0	20.0
10.	. This school	Reading	2.4	19.0	48.8	29.8
	encourages students	3.6.4	(n=2)	(n = 16)	(n = 41)	(n = 25)
	to get involved in	Math	5.7	21.8	51.7	20.7
	extracurricular	4.11	(n=5)	(n = 19)	(n = 45)	(n = 18)
	activities.	All	4.1	20.5	50.3	25.1
			(n=7)	(n = 35)	(n = 86)	(n = 43)

Table 4.8

Collapsed Responses to Teaching and Learning for all Participants (%)

	Survey Item	Subject	Strongly	Agree/Strongly
			Disagree/Disagree	Agree
1.	Students at this	Reading	63.0	37.0
	school don't care		(n = 53)	(n = 31)
	about learning.	Math	65.5	34.5
			(n = 57)	(n = 30)
		All	64.3	35.6
			(n = 110)	(n = 61)
2.	The school	Reading	15.7	84.3
	community has high	_	(n = 13)	(n = 70)
	expectations of all	Math	19.3	80.6
	students.		(n = 17)	(n = 71)
		All	17.5	82.5
			(n = 30)	(n = 141)
3.	Students at this	Reading	7.2	92.9
	school get the chance to work independently.	C	(n = 6)	(n = 78)
		Math	11.6	88.3
			(n = 10)	(n = 76)
	1 3	All	9.4	90.6
			(n = 16)	(n = 154)
4.	Some students at	Reading	47.6	52.4
	this school just cannot be motivated	υ	(n = 40)	(n = 44)
		Math	43.7	56.3
	to do the work.		(n = 38)	(n = 49)
		All	45.6	54.4
			(n = 78)	(n = 93)
5.	Students at this	Reading	10.7	89.3
	school are	J	(n = 9)	(n = 75)
	encouraged to think	Math	19.3	80.6
	critically.		(n = 17)	(n = 71)
	•	All	15.1	84.9
			(n = 26)	(n = 146)

6	I have access to the	Reading	16.9	83.1
0.	tools I need to do	Reading	(n = 14)	(n = 69)
	my job.	Math	27.5	72.4
	my jee.	1124441	(n = 24)	(n = 63)
		All	22.3	77.6
			(n = 38)	(n = 132)
7.	I am dissatisfied	Reading	63.1	36.9
	with opportunities	C	(n = 53)	(n = 31)
	for my professional	Math	63.2	36.8
	growth.		(n = 55)	(n = 32)
		All	63.2	36.9
			(n = 108)	(n = 63)
8.	The best teachers	Reading	36.9	63.1
	and staff are retained		(n = 31)	(n = 53)
	at this school.	Math	40.9	59.0
			(n = 36)	(n = 52)
		All	39.0	61.0
			(n = 67)	(n = 105)
9.	I do not have enough	Reading	67.9	32.1
	autonomy over my		(n = 57)	(n = 27)
	classroom.	Math	70.1	29.8
			(n = 61)	(n = 26)
		All	69.0	31.0
			(n = 118)	(n=53)
10.	This school	Reading	21.4	78.6
	encourages students		(n = 18)	(n = 66)
	to get involved in	Math	27.5	72.4
	extracurricular		(n = 24)	(n = 63)
	activities.	All	24.6	75.4
			(n = 42)	(n = 129)

Research Question 4

Research Question 4, *Is there a relationship between school safety and student achievement?*, was answered using frequencies, percentages, and Pearson's product-moment correlation (r). Results of the Pearson's product-moment correlation (r) indicated there was not a statistically significant relationship between school safety and students' STAAR reading scores, r = .207, p = .059, and STAAR math scores, r = .103, p = .340. The survey questionnaire related to school safety included four items using a 4-point Likert-type scale ($1 = Strongly \, Disagree$, 2 = Disagree, 3 = Agree, $4 = Strongly \, Agree$). The responses related to safety factors that influence student achievement are provided below. Table 4.9 provides expanded responses to school safety for all participants, and Table 4.10 provides collapsed responses to school safety for all participants.

Reading Teachers

Reading teachers (85.7%) *Agreed/Strongly Agreed* that they feel safe outside on school grounds and in the hallways and bathrooms (90.4%). Additionally, teachers *Agreed/Strongly Agreed* that they feel safe in the classrooms (91.6%) and that students are safe at their schools (89.3%). Most reading teachers agree that school safety impacts school climate; however, 14.3% *Disagreed/Strongly Disagreed* that they feel safe outside on the school grounds and in the hallways and bathrooms (9.6%). Furthermore, teachers *Disagreed/Strongly Disagreed* that they feel safe in the classrooms (8.4%) and that students are safe at their schools (10.7%).

Math Teachers

Math teachers (83.0%) *Agreed/Strongly Agreed* that they feel safe outside on school grounds and in the hallways and bathrooms (86.4%). Additionally, teachers *Agreed/Strongly Agreed* that they feel safe in the classrooms (87.5%) and that students

are safe at their schools (86.2%). Most math teachers agree that school safety impacts school climate; however, 17.0% *Disagreed/Strongly Disagreed* that they feel safe outside on the school grounds and in the hallways and bathrooms (13.7%). Furthermore, teachers *Disagreed/Strongly Disagreed* that they feel safe in the classrooms (12.5%) and that students are safe at their schools (13.8%).

Total Teacher Comparison

Overall, reading and math teachers (84.3%) *Agreed/Strongly Agreed* that they feel safe outside on school grounds and in the hallways and bathrooms (88.4%). Additionally, teachers *Agreed/Strongly Agreed* that they feel safe in the classrooms (89.5%) and that students are safe at their schools (87.7%). Most reading and math teachers agreed that school safety impacts school climate; however, 15.7% *Disagreed/Strongly Disagreed* that they feel safe outside on the school grounds and in the hallways and bathrooms (11.6%). Furthermore, both reading and math teachers *Disagreed/Strongly Disagreed* that they feel safe in the classrooms (10.5%) and that students are safe at their schools (12.3%).

Table 4.9

Expanded Responses to School Safety for all Participants (%)

Survey	/ Item	Subject	Strongly Disagree	Disagree	Agree	Strongly Agree
1.	I feel safe outside	Reading	4.8	9.5	60.7	25.0
	on the school	C	(n = 4)	(n = 8)	(n = 51)	(n = 21)
	grounds.	Math	4.5	12.5	61.4	21.6
			(n = 4)	(n = 11)	(n = 54)	(n = 19)
		All	4.7	11.0	61.0	23.3
			(n=8)	(n = 19)	(n = 105)	(n = 40)
2.	I feel safe in the	Reading	3.6	6.0	58.3	32.1
	hallways and		(n = 3)	(n = 5)	(n = 49)	(n = 27)
	bathrooms.	Math	2.3	11.4	62.5	23.9
			(n = 2)	(n = 10)	(n = 55)	(n = 21)
		All	2.9	8.7	60.5	27.9
			(n=5)	(n = 15)	(n = 104)	(n = 48)
3.	I feel safe in the	Reading	3.6	4.8	57.1	34.5
	classrooms.		(n = 3)	(n = 4)	(n = 48)	(n = 29)
		Math	2.3	10.2	60.2	27.3
			(n = 2)	(n = 9)	(n = 53)	(n = 24)
		All	2.9	7.6	58.7	30.8
			(n=5)	(n = 13)	(n = 101)	(n = 53)
4.	Students are safe at	Reading	3.6	7.1	59.5	29.8
	this school.		(n = 3)	(n = 6)	(n = 50)	(n = 25)
		Math	4.6	9.2	63.2	23.0
			(n = 4)	(n = 8)	(n = 55)	(n = 20)
		All	4.1	8.2	61.4	26.3
			(n=7)	(n = 14)	(n = 105)	(n = 45)

Table 4.10

Collapsed Responses to School Safety for all Participants (%)

	Survey Item	Subject	Strongly	Agree/Strongly
			Disagree/Disagree	Agree
1.	I feel safe outside on	Reading	14.3	85.7
	the school grounds.		(n = 12)	(n = 72)
		Math	17.0	83.0
			(n = 15)	(n = 73)
		All	15.7	84.3
			(n = 27)	(n = 145)
2.	I feel safe in the	Reading	9.6	90.4
	hallways and		(n=8)	(n = 76)
	bathrooms.	Math	13.7	86.4
			(n = 12)	(n = 76)
		All	11.6	88.4
			(n = 20)	(n = 152)
3.	I feel safe in the	Reading	8.4	91.6
	classrooms.		(n = 7)	(n = 77)
		Math	12.5	87.5
			(n = 11)	(n = 77)
		All	10.5	89.5
			(n = 18)	(n = 154)
4.	Students are safe at	Reading	10.7	89.3
	this school.		(n = 9)	(n = 75)
		Math	13.8	86.2
			(n = 12)	(n = 75)
		All	12.3	87.7
			(n = 21)	(n = 150)

Research Question 5

Research Question 5, What are teachers' perceptions of school climate factors that influence student achievement?, was answered using a qualitative inductive thematic coding process. The researcher interviewed 10 middle school teachers (five reading and five math) in an attempt to capture a more thorough understanding of the relationship between school climate and student achievement. Questions were asked regarding their perceptions on the topic. Responses were coded and used to develop themes to guide the results of the study.

Themes that developed from the interviews included (a) administration support, (b) voice in decision making, (c) relationships, (d) learning opportunities, and (e) student learning and support. The first theme, *administration support*, included perspectives on how administrators can support teachers and students for success. The next major theme, *voice in decision making*, explains how teachers can have input regarding decisions made at the campus. The third theme, *relationships*, expresses how adults and students interact with each other in school. The fourth theme, *learning opportunities*, speaks to professional learning for teachers, and the final theme, *student learning and support*, includes students caring about their learning and opportunities to support students who are struggling academically.

Administration Support

Based on reading and math teachers' survey responses regarding the school climate factor administration support and its impact on student achievement, the majority of the teacher participants *Agreed/Strongly Agreed* that school administrators influence school climate and student achievement. The participants shared common views regarding *administration support*. The term incorporates the mutual views of the middle school teachers regarding support and feedback. Ms. Dean [Reading] shared,

I feel there is a relationship between administration support and student achievement, because when school leadership serves as true instructional leaders, they know the students, are willing to support improved student outcomes, have difficult conversations, and utilize data to drive instruction, we see success in student achievement.

The participant went on to explain that it is important for school leadership to understand that just like students have diverse needs, so does staff and that support looks different for different people. Another teacher spoke to how administration has supported her, which has led to her success with student achievement. Ms. Jones [Reading] expressed,

I relied on administration a lot, plus support when it comes to materials, when it comes to being able to do certain activities. Really, administration has supported me best by giving me the freedom to be creative and do lessons that, they may not seem like they were the most structured, but administration has always had faith in me that I could pull it together and get it right . . . I think they're very in tune with how well students are doing. I think there is a correlation between administration support and student achievement.

Ms. Jones [Reading] referred to administrators supporting her by allowing her the freedom to be creative and make decisions regarding what is best for students.

Additionally, Ms. Sullivan [Reading] shared, "I think our administration does a good job of supporting us and looking at data and selecting professional growth opportunities to help us in areas that need strengthening." Similarly, Mr. Smith [Reading] voiced that administrators support simply by being there and assisting with data analysis. He explained, "The administrators make it a point when we're doing anything that's with a data dive, within our departments, administrators are there. They are there to help us. They are there to offer suggestions." Ms. Jones [Reading] expressed similar sentiments

involving administrators being there. She spoke to how they follow up with teachers, students, and parents by stating, "Academics are kind of all we have . . . Administrators support just by following up with us, following up on the kids, and supporting and calling parents. I definitely feel supported in that way." Ms. Jones [Reading] related administrator support to following up with different stakeholders in the school, while Ms. Chen [Reading] mentioned supporting students through rewards:

The awards ceremony, which really helps the students feel valued, and what I like about it is there are different categories. So, there is a little bit of recognition for every single type of student . . . and I do see a lot of different things going on at school that helps the students feel they are achieving something and being seen.

When speaking about awards ceremonies, Ms. Chen [Reading] referenced support in terms of administrators recognizing students by having honor roll and perfect attendance celebrations. Five out of 10 participants mentioned feedback as an important factor in administrators providing support to teachers. Ms. Jones [Reading] expressed, "I use feedback from administration . . . things like formal observations, tech walkthroughs and stuff like that. I use feedback from those to help me know what I'm doing right or wrong." Likewise, Mr. Smith [Reading] communicated,

I know that I'm doing well through leadership with our appraisers. Administrators are really good at giving us the necessary feedback. All the information is there in the system where we can look and see what it is we're doing. If we have any questions, they are more than willing to explain and help out.

Mr. Smith [Reading] mentioned support and knowing that he was performing well based on appraisal feedback and receiving explanations concerning feedback if needed. Mr. Tram [Math] discussed administration support in terms of data analysis by sharing, "We look at the data with administrators. We reflect on them, they always give us feedback

and see, this is where we're good at . . . what else can we work on to improve for next time?" He went on to express autonomy that he is allowed to have at his school:

I personally feel, from my experience, the level autonomy I have at this school really allows me to perform with what works best for me and my students. I'm able to adjust that every day to see what works for each class and students . . . It allows me to change my approach and adjust my effort and attention to each class dynamic lending on that. But especially with the Deans, I always reach out if I have any questions . . . So definitely admin and staff are very supportive of that matter.

Ms. Garcia [Math] mentioned feedback as an important factor in administrators providing support to teachers. She explained,

She, the principal, always gives us information about how the school is doing based on things that they're sharing from the district. I also know personally that I'm doing good based on the feedback that I get from the administrators or other teachers. We're a very close community. We always talk to each other to see how we can improve.

Based on this statement, Ms. Garcia [Math] affirmed that her principal is transparent with communication, provides feedback on performance, and allows collaboration amongst the staff in order to improve instructional practices. Ms. Patel [Math] discussed feedback as it related to being used to grow teachers. Her perspective was explained as follows:

It's the job of the administration to grow their teachers . . . if they are growing their teachers properly, providing feedback, and investing their time in educating their teachers and professionally developing them and growing them in the sense where they look at their lesson plans and they'll look at their teaching styles and

not negatively, but a positive, constructive way . . . there is a relationship between administration support and student achievement.

Ultimately, Ms. Patel [Math] conveyed administrator support encompasses growing teachers, providing effective feedback, educating teachers via professional development, and providing constructive feedback when looking at how teachers plan and their teaching styles. Ms. Garcia [Math] spoke to administrators being visible, approachable, and involved with students by sharing,

Whenever students see the administrators, especially when they're in the hallway and stuff like that, they always look up to them. They go to them for their opinion on maybe some classes or if they're going through some personal stuff, they also go to talk to them. So, if you see the administrators in the hallway or being involved with the students, you will definitely see a growth of students performing in whatever class they're in.

The participant went on to explain that administrators are always involved in what is going on at the school and the promotion of academic success and honor roll. Mr. Mayo [Math] shared, "Administrative support encourages teachers to collaborate with each other in terms of discipline, strategy, planning, and data analysis for student achievement." Ms. Patel [Math] stated, "When you have that professional relationship, and the teachers know that you're doing this for a common goal, I think there's a huge correlation . . . student academic achievement, administrative support, and relationships." Mr. Lee [Math] conveyed,

I believe that there is a high correlation between administration support and student achievement. The administration sets the campus goals and policies. The administration leads the way in promoting and nurturing the culture of excellence on a campus. The administration communicates and manifests the expectations

that students need to adhere to in order to have a safe and conducive campus-wide environment in partnership with faculty and parents.

In summary, administration support was identified as a major factor for influencing and supporting student achievement. The participants identified this as an influence for teacher achievement in regard to receiving materials and having the freedom to be creative. Additionally, participants referred to administrators promoting academic success, providing feedback, assisting with analyzing data, communicating expectations, and growing teachers. All participants articulated support and/or feedback as ways to influence student achievement.

Voice in Decision-Making

Based on reading and math teachers' survey responses regarding being involved in decision making and problem solving, the majority of the teacher participants Agreed/Strongly Agreed that they have a voice in decision making. The participants shared common views regarding voice in decision making. The term explains how teachers can have input regarding decisions made at their campus. Having voice in decision-making, as expressed by interviewed participants, was of major importance. Each of the reading and math/teachers provided insight on having a voice in decision making. The following response illustrated this theme. Ms. Jones [Reading] stated,

I think people have a voice if they choose to have a voice. I chose to be on the decision-making committee. That's my way to have a voice. I also am not hesitant to respectfully approach a Dean and ask a question or offer a suggestion. I feel like we have administration that's opened to listening . . . I've never felt shut down by administration whenever I had a question or a suggestion or anything.

Both Ms. Jones [Reading] and Ms. Dean [Reading] expressed the importance of being involved in campus committees as a way to give feedback to administrators. Ms. Dean [Reading] stated,

I believe that my voice is validated in decision-making, because the principal is open to feedback. I am also a leader on the campus and involved on committees. In addition, risk-taking is encouraged. If a teacher has an idea and articulates the vision, as long as it is in the best interest of student achievement and resources (materials, time, logistics), she or he will likely see her or his dream come to fruition.

In brief, Ms. Dean [Reading] believed that she has a voice in decision making, as she is involved in campus committees and trusts that if teachers have ideas that are in the best interest of students, they will receive what they are asking for. Ms. Patel [Math] provided input on having a voice in decision making by asserting,

Since I am a part of the SDMC, I have a voice in decision making. I also am the department chair, so I work very closely with the Dean, and we tell her what's working, what's not working, and what can change. She's very open to advice/ideas . . . We meet every Wednesday for science department, but it's not us only. Every department meets every week to inform decisions.

Likewise, Ms. Patel [Math] agreed that she has a voice in decision making, being a part of the site-based decision-making committee and serving as department chair. Ms. Garcia [Math] and Mr. Tram [Math] agreed that they have a voice in making decisions on campus. Mr. Tram [Math] stated, "For the most part, I believe my voice is heard and my opinions are . . . I can voice my opinion freely. And of course, everyone is receptive to what I have to say when it comes to my professional opinion." Likewise, Mr. Mayo [Math] touched on the topic by sharing, "Yes, I do have a voice to share my opinion.

Any concern I have is being heard by the administration and allowed to be approved by the school staff." Mr. Lee [Math] went more in depth by conveying,

The Math Department holds a weekly PLC where we discuss concerns, issues, areas for glows and grows, best practices, and innovations. We give our insights and at the same time offer suggestions for improvements. The PLC arrives at a consensus, and the administrative team accommodates it as part of policy. The school also holds a faculty meeting once a month to celebrate campus and staff achievements. During faculty meetings, staff and the administrative team can voice out concerns, deliberate on different sides of issues, and build consensus. The principal also adheres to an open-door policy to hear and address concerns from all stakeholders. Under this premise, I believe that every staff member has a voice in decision making.

These participants conveyed being comfortable speaking freely and communicating with administrators; however, not all felt their opinions mattered when it cames to making major decisions for their campus. Ms. Chen [Reading] expressed, "I'm not always asked my opinion on certain things, and sometimes in the past, I feel it's not always taken into account, but then other times I do feel I say something, and people are listening." Ms. Sullivan [Reading] further expressed,

I have served on the SDMC Committee. To be honest, I don't feel like I have a lot of say-so in that area. I feel like I am more or less present, and I think most of our decisions, as far as school-wide, in that sense, are decided upon, you know, by administration. And that's just because when you're talking to other teachers, and you're brainstorming and things like oh, I would like to see this happen, or, I think we should do this, and sometimes suggestions are given. I just don't see it a lot in that way.

Two teachers mentioned having voice in decision making when it comes to their classrooms. Mr. Smith [Reading] shared involving anything outside of the classroom, he does not really believe he has a voice. He conveyed this message:

I do feel that I have a voice within the four walls of my classroom. When it extends outside of that, I don't think I have a voice in that because I do think that there's a lot of behind the scenes things that take place within a school and within the departments. So I don't even think it would be feasible to say that it's not fair that I don't have a say, but it's like there are just certain things that goes [sic] on behind the scenes that I'm sure that different levels of administration makes those decisions.

Ms. Sullivan [Reading] shared similar sentiments regarding having autonomy in her classroom. She revealed,

I feel like I have a lot of autonomy in my classroom just because I get to look at what's required as far as the planning guide and sort what should be taught to the students. I get the opportunity to plan and implement that in the way that I see fit. There is no one giving me a mandate on this is what you have to do, or when I have walkthroughs with deans or administration, no one is saying to me, no, I want you to do it this way. It has to be done this way. So, I have a lot of autonomy in my classroom. There are some things that I do have to follow that are school-wide, that are passed down or mandated from my administration.

All participants indicated that having input regarding decisions made on campus was an important contributor to having a positive school climate. Common language around being involved in campus committees, having leadership opportunities, and the freedom to voice concerns during PLCs and faculty meetings, were mentioned as ways to have a voice in decision-making. All five math teachers expressed having a voice in problem

solving and decision making at their campuses. While two reading teachers conveyed they have a voice in problem solving and decision making, there were three who felt their opinion was not valued or did not matter outside of their classrooms.

Relationships

Based on reading and math teachers' survey responses regarding the school climate factor and building relationships, the majority of the teacher participants *Agreed/Strongly Agreed* that building relationships impacts school climate. The term expresses how adults and students interact with each other in school. Participants interviewed shared how teachers interact with students and students with each other in their schools. Teachers expressed a personal responsibility for teaching and learning as ways to strengthen relationships with students. Positive interactions and being open minded were mentioned throughout the interviews. Ms. Jones [Reading] began to speak about interactions that existed between adults and students at her campus. She explained,

I think that the interactions are overall positive between the adults and the students on campus, especially for eighth grade. I sat in on a number of PLCs where teachers were talking about the student data and they were able to speak, at length, about different situations going on with the students, personally, that could have impacted their scores. I got the impression that most teachers are going above and beyond to get to know their students and know their situations in order to really have a full understanding of why scores are the way they are, for better or for worse...and then through student conversations, I would still say that I think the majority of students feel supported and heard by most of their teachers.

Based on these statements, Ms. Jones [Reading] asserted that adult and student interactions are positive. She supported her assertions by sharing how adults are able to discuss reasons students are not performing academically. An equally significant aspect

comes from Mr. Smith [Reading]. He believed that adults care for the students and offer them second chances if needed. When asked about interactions between adults and students in the school, he stated,

For the most part, I would say that the adults really do cherish and care for the students. I see there is a lot of relationships that are present with teachers and students for the most part. The teachers really do care, and I've witnessed and experienced where students are having a bad day or something like that with one class, teachers will send the kid off to another teacher where they can calm down, talk to them, and you just see that there's a relationship that's present.

Though interviewed teachers revealed that building relationships with students is important, five of the teachers mentioned encountering interactions that were not so positive and needed improvement. Ms. Chen [Reading] voiced that it is the teacher's responsibility to teach every student that walks into the classroom. She expressed,

It doesn't matter who it is. It doesn't matter what's been said about them. You start fresh the moment they walk in your room every day, every year. I really think we need to honor that no matter what happens . . .I would say the majority of teachers have a really positive rapport and relationship with students, and the students really respect and listen to them. I would say there are a few teachers where I think the relationships can be improved, and that is why they're having some management issues. The students need to be respectful regardless, but it's so much easier when you have that foundation with them.

Allowing students to redeem themselves every day to improve relationships encapsulates Ms. Chen's [Reading] statement. Ms. Sullivan [Reading] shared that sometimes students can become disrespectful. She revealed that she has had to apologize to students for not handling a situation in a certain way, because she is the adult. She expressed, "I would

say most often interactions are nurturing and respectful. From time to time, I think this is anywhere, you may have situations where you might have some disrespect that may be displayed." She went on to say,

I have been in a situation where maybe I should have handled a situation in a different way, but I've come back, and I've apologized for it. I have pulled a kid aside and said I'm the adult. I probably should have taken this situation, and handled it differently, and so for that, I'm going to apologize. And so I think for the most part . . . very nurturing and respectful.

Ms. Dean [Reading] described how interactions in her school vary. She stated, "There are some who build relationships with all students, where mutual respect goes both ways." She discussed how this is seen not only in the classrooms, but other common areas as well. She explicitly stated,

I find that teachers who were not exposed to pedagogy in their teacher preparation programs fail to recognize that some of what they see is typical behavior for students at this age and stage of development. They simply think the students are "bad" or come from parents who do not care. None of this is the case. As a result, their approach can oftentimes create barriers to positive communication and better relationships with students.

Ms. Dean [Reading] believed that some teachers are not recognizing that middle school students are adolescents. She alluded to teachers hindering having positive relationships with students based on their biases. Ms. Patel [Math] later shared, "Interactions and relationships are mostly positive. Some teachers are strict and stern. I have heard of interactions that are not all positive." Her comments indicate that while most interactions are positive, not all are positive. Ms. Garcia [Math] stated, "Adult interactions with students are professional for the most part. You often hear students asking for real life

advice." This suggests that students are comfortable communicating with staff members on her campus. Mr. Lee [Math] discussed relationships in terms of services available to strengthen relationships with students. He expressed,

Part of every class norm and campus mantra is to have respectful interactions between adults and students. This helps build relationships. In a homeroom class, student's social and emotional needs are given attention and resolution. The school also extends wraparound services to students who need assistance. In the classroom setting, students can ask questions, get clarification, and help to carry out assigned tasks.

In short, Mr. Lee [Math] suggested that relationships can be built if supports are provided related to student's needs, whether it be emotional or academic support. Mr. Tram [Math] also mentioned witnessing positive relationships. Additionally, he shared that he has observed incidences that were not so positive. He conveyed,

These teachers and students have been supportive in their words and interactions. The majority of time it's kind words, very admirable, and also trying to give the autonomy for them to get things done. There are several incidences where I have observed interactions that can be seen as confrontational, provoking, and students can feel like they're attack, targeted, or singled out. As teachers, we sometimes overlook how that affects the students.

As with others who participated in the study, Mr. Tram [Math] shared that while he has observed positive relationships, he has observed instances where students believed they were being attacked. Ms. Jones [Reading] revealed that she has a personal responsibility to teach students and keep them safe by indicating,

I feel a personal responsibility to keep kids safe. My personal goal is to try to give them an experience that isn't like any experience they'll have. I don't like

that kids don't like school. In my perfect little world, I will work to create an environment where they don't really feel like they're in school, but they're still learning. To the students, I feel responsible for . . . being creative or being fully present every day. We're trying to give them a learning experience that will hopefully keep their attention and make them appreciate English a little bit more.

In speaking about relationships and interacting with students, safety, care for students, and personal growth was mentioned. Ms. Patel [Math] spoke to these topics as illustrated by the comments below:

As an educator, it's my responsibility to make sure to create an environment where students feel very comfortable and safe and they feel that they're taken care of. My students perceive that I'm a very easy caring teacher and because of that perception, I believe they're willing to work for me, which is unlike this evil person, this mastermind . . . The belief that I care for them, and I do care for them, that's why they're willing to do the work for me and if I give them extra work, they are willing to go the extra mile.

In terms of how students interact with each other, Ms. Chen [Reading] conveyed, "For the most part, students are open-minded and accepting of all the different personalities and interests students might have." Ms. Sullivan [Reading] declared that middle school students are very social. She expressed, "I think a lot of them look forward to coming to school to be with their friends." Mr. Smith [Reading] stated, "I would say sometimes they can be aggressive . . . students don't have filters and they may say certain things to students of other cultures or ethnicities." Additionally, Ms. Chen [Reading] discussed her concerns regarding student interactions. She shared,

I do think that we can improve a little bit perhaps about language, in terms of how I say this, how to approach different ways people live their lives, and just being more informed about all the different ways people can be. I think that is definitely something any school, including my school, can work on.

Ms. Chen [Reading] asserted that if students understood differences in each other's cultures, they would interact with one another in a more positive way. Mr. Mayo [Math] and Mr. Tram [Math] both agreed that students build relationships with one another. Mr. Mayo [Math] stated, "Most of the students interact in a positive, respectful way." Mr. Tram [Math] explained,

The students, among themselves, interact positively and definitely they care for each other. They always voice their concerns on anything they have trouble with. They don't resort to physical confrontation like that. There are some instances where students use inappropriate words, which is why I try to reaffirm them, saying that there are better words to use instead of that . . . So, but they're learning. They're learning how to choose their words better.

Ms. Garcia [Math] shared similar feelings by expressing, "Some students really care about their peers. It's a mixture because there a couple that we have to stay on top of." Likewise, Ms. Patel [Math] stated, "Some are nice to each other; however, we have more becoming mean and inappropriate." Mr. Lee [Math] shared interactions in terms of how students relate to each other in the classroom and at on-campus events. He declared,

In the classroom setting, the teacher utilizes literacy strategies such as random calling, Think Pair Share, Round Robin, and whole group discussion to facilitate and generate student-to-student discourse. The use of sentence stems, free response questions, and universal prompts are integrated in instruction. In grade-level assemblies, campus-wide events, and symposia, students participate in discussions and collaborative tasks.

The consensus of the participants was that adults and students, for the most part, had positive interactions with each other; however, three reading teachers felt that although interactions were mostly positive, there was still the need for improvement. Three math teachers shared instances where student-to-student interactions were not so positive. One reading and one math teacher voiced that they took personal responsibility for students' safety, creating a positive learning environment, and showing students that they care. All participants held themselves accountable for building relationships with their students. Students being more aware and knowledgeable about other student's cultures and ethnicity was touched upon by teachers. Additionally, creating a safe environment for students was important to the contributors as well.

Learning Opportunities

Based on reading and math teachers' survey responses regarding the school climate factor, teaching and learning, the majority of the teacher participants Agreed/Strongly Agreed that adult learning impacts school climate. The term, learning opportunities, speaks to professional learning for teachers. This theme emerged as a result of teachers speaking about whether or not professional development on campus was aligned to professional learning and growth. Ms. Dean [Reading] expressed the following:

On-campus professional development is aligned to professional learning/growth, because as we meet with our content area teams, we focus on the curriculum, district, and campus goals. Each week, school leadership provides an agenda in advance, so teachers know what to look for. We discuss data and backwards plan for the upcoming week . . . During PLCs, we look at curriculum documents and participants engage in At-Bats. We also review assessment data and compare it to

historical data using the various district platforms and have those discussions about individual student achievement and root causes of nonmastery.

Ms. Dean [Reading] alluded to experiencing learning in Professional Learning Communities (PLCs). She shared that during this time, there is a focus on the curriculum, school goals, data analysis, and practicing effective instructional practices. Likewise, Mr. Smith [Reading] conveyed similar thoughts regarding PLCs on his campus. He stated,

We get the agendas every week emailed to us, and we allot time within each PLC to work together across grade levels as well as within grade levels within our departments . . . we kind of look at things that we can do to improve based on what the data is [sic] saying and that we're struggling with or what students are not successful with academically.

Ms. Jones [Reading] spoke to on-campus professional development being aligned to professional growth by stating, "I think that they're definitely aligned, but whether or not it's always impactful, may be a different story, but I think the attempt to have them aligned is always there." As the conversation transitioned to providing examples of how PLCs have led to professional learning and growth, she stated,

So, I know that we constantly do at-bats in our groups, and I know that there have been times when teachers have done at-bats that have led to full out PLCs later on, if that make sense. Maybe a teacher expressed something in a PLC that the department chair thought was worthy of being a whole segment all by itself . . . I've seen the department chair do segments on challenging students and how to scaffold reading, so that struggling readers are able to get through and understand more challenging articles . . . I know in the English department, it's always centered around some type of professional learning experience.

Ms. Chen [Reading] discussed a recent professional learning opportunity that was held at her campus. She shared,

The one that we had recently, a couple weeks ago, the SEL and the Lead4ward one, I thought were actually pretty good. I liked them a lot, and I thought they were very . . . timely, especially with data, of course, with the STAAR test coming up . . . also SEL, I think, especially around this time of year, teachers are starting to get a little bit burnt out. And so, just a reminder of like why are we here and how can we make this better for the students and for us?" I think that was a really good timely PLC . . . I will say for the most part, PDs are very much intentional and aligned to our growth.

Ms. Chen [Reading] mentioned timeliness of professional development shared at her campus. At the time, teacher burn-out was observed and the STAAR test was quickly approaching. Placing emphasis on teachers' social emotional learning and resources related to STAAR was appreciated by this teacher during that portion of the school year. Ms. Sullivan [Reading] spoke to getting frustrated with PLCs, at times, due to not being able to collaborate with her colleagues. She voiced the following:

Honestly, I feel like the opportunity is there. I felt a little frustrated at times with PLCs because sometimes by the time we get through business of things that's on the agenda, then there's not a whole lot of time at the end to actually sit with your colleagues and collaborate. Now, we collaborate in a general sense, we'll talk about different things, but sometimes there is an agenda that the administration is trying to get through, and then there's not a whole lot of time at the end.

Not having enough time to collaborate with colleagues was a cause for dissatisfaction for Ms. Sullivan [Reading]. After administrators covered their topics, little time was left for

teachers to engage with one another. Mr. Lee [Math] shared that learning takes place in PLCs. He stated,

There are a variety of opportunities for learning and collaboration. In PLCs, we collaborate on improving instruction, achievements, and sharing best practices. In faculty meetings, we also collaborate for interdepartmental endeavors, sharing of effective strategies, and campus-wide projects and events . . . All professional development and PLCs are geared towards professional learning by replicating research-based effective teaching strategies and best practices.

In discussing opportunities for collaboration, Mr. Mayo [Math] indicated, "We have weekly math PLC's focusing on collaboration about best practices, data analysis, and student intervention. The sharing of best practices, technology, and course training helps me a lot to enhance my professional growth as a teacher." Ms. Garcia [Math] conveyed that she participates in PLCs where they discuss practices to assist in classes and get ideas on teaching different units. Ms. Patel [Math] expressed,

There are learning opportunities when we meet as a team; nevertheless, there needs to be more alignment to individual department needs. I feel there is not enough training and sharing resources. Also, there is more accountability for STAAR teachers, than those who don't have STAAR. Their focus is on at-bats, and not necessarily data.

Like Ms. Patel [Math], Mr. Tram [Math] shared comparable feelings by indicating,

During my time here, I feel like PLCs are not really PLCs, so there's little

collaboration during our meetings. There are scenarios where we like collaborate

a little bit more with our instructional practice and how we approach it, but for the

most part, I feel like those weren't as impactful as I would like towards my

professional development.

Based on responses regarding learning opportunities, six teachers (three reading and three math) felt information shared during professional development/PLCs contributed to their professional learning and growth. However, four teachers (two reading and two math) expressed concern regarding alignment, having to get through business items on the agenda, and lack of time to collaborate with colleagues. Professional development aligned to department needs and opportunities to support struggling students was also mentioned by participants.

Student Learning and Support

Based on reading and math teachers' survey responses regarding the school climate factor, teaching and learning, the majority of the teacher participants Agreed/Strongly Agreed that student learning impacts school climate. The term, student learning and support, includes students caring about their learning and opportunities to support students who are struggling academically. This theme emerged as a result of teachers speaking about how students perceived learning and options available to support students having academic difficulties. In discussing how students felt about learning, there were varying opinions concerning the topic.

When speaking about learning and achieving goals, Ms. Chen [Reading] stated, "I feel a lot of pride because students in school want to learn and achieve their goals. They are a success story to me, and so, I feel a lot of pride when I see that in students." Ms. Sullivan [Reading] shared,

I think a lot of the students really actually do care about learning, and the evidence is from the kids who try really hard, and they meet the challenge. They get in step with the routine of middle school, and then even with the kids who have such a hard time, and they struggle most of the year, I think for the most part, they really want to learn. They just haven't figured out how to.

Similar to Ms. Sullivan [Reading], Ms. Dean [Reading] communicated that students do care about learning at her school by stating, "Most students care about learning at my school. I feel this way because they complete schoolwork and constantly check their own grades. Most of them have high expectations for themselves." Ms. Jones [Reading] provided details regarding students caring about learning; however, she sensed the lack of activities and character in the school affected the way students perceived the school. She shared,

I 100% think kids care about learning . . . When I have conversations with them, I think that they feel very blah about . . . for lack of a better word . . . the lack of activities, extracurriculars sports, even just us having more of an identity, it just makes them feel detached sometimes, like they're going through the motions . . . It could come down to simple stuff like a mascot, like a logo, a phrase everybody uses, hallways that have character. It's a different kind of vibe, which I don't think of it as a bad thing necessarily. I think it's just another one of those things that should've come from the top down, but kind of didn't . . . I think that makes the kids feel just not happy, not excited about school.

While Ms. Jones [Reading] homed in on activities and culture, Mr. Smith [Reading] expressed that students, for the most part, do not care about learning, as they do not take advantage of opportunities offered at his school, with it being a STEM school. He conveyed,

I would say for the most part it's like 50/50, but I would say no for the most part because a lot of the students, it's like they're here, but their mindset is not I'm here to learn. I'm here to get an education. Let me take advantage. Let me take these opportunities now . . . That just doesn't happen.

Mr. Mayo [Math] expressed, "Most of my students are actively involved and engaged in learning. I do have behavior issues with very few students." Mr. Tram [Math] stated,

The majority of my students . . . I would say 99% of the students, they are eager and motivated. From my experience, they come in my class, and they're willing to try and learn . . . especially the higher achieving students, they're eager to learn and be challenged.

Ms. Patel [Math] spoke to students coming from diverse backgrounds and having pride in learning. She had a mixed opinion regarding students caring about learning based on their upbringing. This is reflected in her comments below:

We are a mix of different types of students in a pretty diverse school. We have students that come from backgrounds of high achieving parents, and they have taught them how to take pride in learning. Then we have students that come from backgrounds that are not conducive for them. I see that I have students that when they finish a project, like Cary . . . she's ecstatic, she's happy, she knows she gets something, and then I have students . . . they lack that element. So, to keep that passion and pride in learning, it's a tough job, and we try to promote it, but there's so many things that go with it.

Ms. Garcia [Math] spoke to being proud when her school performs well and transitioned to speaking about students caring about learning. Her sentiments were expressed as,

They do care about their education, and they do care about learning and being the best that they can be . . . I have a section for data . . . you often see students looking at the data to see if they are beating the other classes, and they always try, and they tell their classmates, hey guys, let's do this. Let's complete it so that we can beat this class, or we can do better than that class.

As conversations progressed, opportunities to support students who were struggling academically were discussed. Ms. Chen [Reading] and Ms. Jones [Reading] were able to provide information on supports available to struggling students. Ms. Jones [Reading] shared,

We have weekly tutorials, we have enrichment classes, and we also have the thinking skills class, which I think depends on . . . I know for me, thinking skills is a lifesaver because it's my lowest cohort, so I get to see them every day, and I get to reinforce things. It's been really, really helpful to have them.

Comparably, Ms. Chen [Reading] expressed,

Academically . . . there are the enrichment classes during our electives, and those are where our Tier 3 students are supposed to go and Tier 2, as well . . . I like that it's built into our schedule so that every student who absolutely needs it is identified and given some sort of service. We also have our tutorials, and then, also within the classroom itself, we have small group. We have reteaching, one-on-one, peer tutoring, things like that, and those are all campus-wide expectations for teachers.

Ms. Dean [Reading], similar to Ms. Jones [Reading] and Ms. Chen [Reading], mentioned after school tutorials. She discussed students attending content-based intervention classes in reading and math. She further explained,

We also have community partners, such as math tutors from the University of Houston. Our campus utilizes *Summit K-12*, an online platform for Emergent Bilingual students in support of reading, speaking, listening, and writing. All students have access to other online platforms, including *Mathia* and *Imagine Learning*.

Mr. Smith [Reading] and Ms. Sullivan [Reading] also mentioned their school having after school and weekend tutorials to support students. Furthermore, Ms. Sullivan [Reading] discussed having academic camps and summer school at her campus. When discussing student learning, Mr. Lee [Math] communicated the following:

Students give priority to their learning by keeping up with learning tasks and completing their assignments. They prepare for assessments by participating in tutorials and other interventions initiatives. They buy-in to campus improvement goals by doing their best to perform well on district- and state-mandated assessments. They also perform well in competitions and bring recognitions for the school.

He went on to share how he knows his students are learning and the outcomes associated with them learning by voicing,

My students are doing well in school if they are able to translate the concepts that they have learned into high achievement results, meeting standards, and showing significant growth as compared to their previous performance. Students are successful when they are able to understand the concepts and apply their learning to real-world situations. Additionally, they are able to actively participate in academic and extracurricular activities and achieve their goals.

Ms. Patel [Math] conveyed that her campus has enrichment classes, tutorials, and the school counselor for SEL support for students who may be struggling academically. Mr. Lee [Math] concurred by declaring,

Each department has scheduled weekly after school tutorials. Saturday tutorials are also held to revisit, reinforce, and master the concepts taught as a preparation for the state assessments. Volunteer tutors from University of Houston and Baylor College of Medicine also conduct their tutorials to help struggling

students. There also a variety of online resources that are available to enhance student learning.

Ms. Garcia [Math] shared, "In addition to tutorials, when students email for help, I respond in an attempt to offer further support." In addition to mentioning tutorials, Mr. Tram [Math] expressed,

The one thing I definitely like about . . . I guess the schedule . . . is that we offer enrichment for students who need to work on improving their math abilities and their academics, but at the same time, they're also taking away their own electives.

The consensus of the participants was that students generally care about learning and receiving high achievement results, but lack of activities and character in the school could affect students' perceptions of the learning environment. One reading teacher indicated that students do not care about learning. Opportunities to support students struggling academically included after school and weekend tutorials, small group instruction, enrichment classes, online learning platforms, academic camps, social-emotional support from the counselor, use of community partners for tutoring, and summer school.

Summary of Findings

Qualitative analysis illustrated the importance of administration support, having a voice in decision making, having relationships, and learning opportunities as important school climate factors that influence student achievement. Additionally, most participants felt that if administrators could grow teachers, provide feedback, build relationships, and set goals, they could support the promotion of academic success. Overall, most of the participants articulated that having a voice in decision making, collaboration, relationships, and students and teachers caring about learning could have an extreme impact on student achievement.

Conclusion

This chapter presented the analysis of qualitative and quantitative data collected from surveys and interviews, participant demographics, and processes of answering each research question. In the next chapter, findings will be presented to compare what was found through this study with existing literature. Implications of this study in education and future research will be discussed.

CHAPTER V:

SUMMARY, IMPLICATIONS, AND RECOMMENDATIONS

The purpose of this study was to examine the relationship between teachers' perceptions of school climate and student achievement of middle school students. School climate factors included administration support, building relationships, teaching and learning, and school safety. Student achievement included results from the Reading and Math STAAR assessments. School climate and student achievement have been well documented in research literature; however, because school climate encompasses several dimensions, it has been limited by failing to identify which factors associated with school climate impact student achievement (Astor & Benbenishty, 2018).

To quantify teacher's perceptions toward school climate, 220 middle school teachers from the southeast region of Texas completed The New Jersey School Climate Survey. The teachers also participated in semistructured interviews; qualitative data deepened the understanding of teachers' perceptions of school climate and student achievement of middle school students. This chapter presents a thorough examination of the findings, along with the implications of these findings, and future research recommendations.

Summary

The research questions addressed whether there was a relationship between teachers' perceptions of school climate and student achievement of middle school students. The following research questions guided this study:

- 1. Is there a relationship between administration support and student achievement?
- 2. Is there a relationship between building relationships and student achievement?

- 3. Is there a relationship between teaching and learning and student achievement?
- 4. Is there a relationship between school safety and student achievement?
- 5. What are teachers' perceptions of school climate factors that influence student achievement?

School climate has four variables (Administration Support, Building Relationships, Teaching and Learning, and School Safety). Student achievement is defined by student performance on the Reading and Math STAAR test. The researcher examined the relationship in each acknowledged question.

Research Question 1

The current study did not provide evidence of a direct relationship between administration support and student achievement, as there was not a statistically significant relationship between administration support and students' STAAR Reading and Math scores. This finding is consistent with the research of Huang, Hochbein et al. (2020) who sought to discover if administrators were spending their time focusing on school climate and student achievement. Findings indicated that middle school administrators' jobs were filled with fragmented responsibilities that distracted them from focusing on student achievement, and as a result, the achievement difference was not statistically significant at .05 level.

However, there was evidence that reading and math teachers believed administration support does influence school climate based on most of the responses from the school climate survey. Additionally, qualitative findings from the interview revealed that administration support was identified as a major factor for influencing and supporting student achievement. Findings of the current study indicated that administration support is important when it comes to teacher achievement, promoting

academic success, providing feedback, analyzing data, communicating expectations, and growing teachers. This is congruent with Lewis et al. (2016), who indicated that administrators are the leading force in influencing school climate. It also aligned with Kominiak (2018), who concluded that principals who promote having a strong school climate and a shared vision have the greatest growth in student achievement.

In looking at differences, one explanation in results could be that only a small sample of middle school teachers was included in the research. Another explanation could be associated with limited narrative on the survey versus being able to get clarity of responses from the interviews. This allowed reading and math teachers to provide better insight regarding school climate factors identified in the survey. Similar to the current study, Park et al. (2019) discovered that administration support positively impacted professional learning and teacher accountability, and as a result, it influenced student achievement in math. However, quantitative data revealed that the effect of administration support on the aforementioned were not statistically significant.

Past and current research continually shows that administration support may play a role in school climate and student achievement. This finding mirrors research indicating that school climate is associated with student achievement in secondary students (Daily et al., 2019). Nevertheless, it is important to identify which variables of school climate impact student achievement. In the research, the relationship between school climate and student achievement was examined using quantitative data from surveys and student achievement results. Qualitative data was used to expound upon answers provided from the survey. Depending on the instrument utilized, different results could have surfaced based on the wording included or how teachers felt on the day they took the school climate survey.

Research Question 2

Research Question 2 did not provide evidence of a direct relationship between building relationships and student achievement, as there was not a statistically significant relationship between building relationship and students' STAAR Reading and Math scores. For the current study, relationships comprised of adult interactions with each other and the students and student interactions with each other. Based on the quantitative findings, this is inconsistent with Mora-Ruano et al. (2019) who found that when teachers build relationships by working together, and focus on data to improve student achievement, results would be positive. However, findings are consistent with Newland et al. (2019) whose study indicated that there is a need to build better relationships and climate to support students' welfare.

For the current study, qualitative findings revealed that adults and students, for the most part, have positive relationships with each other; however, interview responses indicate there is still the need for improvement. While reading and math teachers conveyed that overall relationships are positive, the majority affirmed they have noticed interactions that have not been so positive. As indicated by Shafer (2018), school climate is not as strong when relationships are not built, and there is a lack of communication. To gain greater student achievement, trust, relationships, and social interactions within the school are becoming more critical (Moses, 2019).

The mixed responses from teachers in the current study could be the result of wanting to believe relationships on their campuses are strong, although the uncertainty affirms there is still work to be done in this area. In this study, all participants took responsibility for the need to build relationships with their students. As voiced by Moses (2019), to enhance trust in schools, the interdependent relationships must be studied, as a small group of stakeholders working in isolation, cannot accomplish what it takes for a school to be successful. According to Prothero (2020), having strong relationships

between teachers and students, as well as teachers with each other, motivates teachers and allows them to feel more supported, which influences student achievement. Findings from this study implies there is a need for adults and students to build better relationships with each other.

Research Question 3

According to Kraft and Falken (2020), teachers' performance depends on how compatible their skills are with students' desires and the learning environment. As with Research Question 2, the current study did not provide evidence of a direct relationship between teaching and learning and student achievement, as there was not a statistically significant relationship between teaching and learning and students' STAAR Reading and Math scores. For the current study, teaching and learning encompassed teachers' beliefs on having appropriate resources, professional growth, and autonomy in their classrooms. It also included how students feel about learning and student autonomy. This finding was consistent with the research of Mahler et al. (2018) who conducted a study to further contribute to predictors of students' achievement and teaching in schools. Findings indicated there was not a significant relationship between teachers' judgment of their own capabilities to ensure desired results of engagement and learning and student achievement. Yet, there was a positive relationship between student achievement and teachers' motivation for teaching the subject.

Participants' survey responses are almost equal when looking at whether or not students in their schools can be motivated to do the work assigned to them. Participants Agreed/Strongly Agreed (54.4%, n = 93) that students cannot be motivated to do the work, while (45.6%, n = 78) Strongly Disagreed/Disagreed that students cannot be motivated to do the work. However, responses on other survey items indicated that teaching and learning impacts school climate. This is aligned with the research of Kaplan

and Owings (2004) who found that the strongest gauges of student achievement are the teacher and their quality of teaching. In the current study, qualitative findings suggested that six teachers (60%), three reading and three math, believed information shared during professional development and/or PLCs contributed to their growth as an educator. Two reading and two math teachers (40%) expressed concern regarding alignment of presented material shared as it related to their subject area. Teachers also mentioned not having enough time to collaborate and plan with colleagues. This suggested that teachers need more structured professional development aligned to their subject area.

Additional qualitative findings indicated that students care about learning and their achievement. Opportunities to support struggling students included tutorials, small group instruction, online learning platforms, and summer school. Previous research findings promoted teaching activities that have a positive effect on student achievement and discouraged those behaviors that correlate with low student achievement (Rashid & Zaman, 2018).

Research Question 4

As with previous research questions, there was not a statistically significant relationship between school safety and students' STAAR Reading and Math scores. For the current study, school safety was associated with being safe inside the school, specifically, in classrooms, hallways, and bathrooms. Feeling safe outside on school grounds was also surveyed. Although there was not a statistically significant relationship, survey responses indicated that most teachers Agreed/Strongly Agreed that they feel safe inside and outside of the school. This aligned with Kraft and Falken (2020), who expressed that a safe school environment allows students and teachers to focus on learning. This is consistent with findings from a study which suggested that

there is a negative implication associated with feeling unsafe in the classroom and student achievement (Lacoe, 2020).

Qualitative responses indicated that all participating teachers felt safe inside and outside of the school. However, most participants answered without providing an explanation as to why they felt that way. For the current study, teacher safety was not identified as an area of concern by participating teachers. Based on interview responses, this study found that teachers were not concerned about their safety due to their campuses having a safety plan in place, teachers not being attacked, and never having incidents happen that would cause them to feel unsafe. This was compatible with findings from Laurito et al.'s (2019) study which suggested that middle school students who attended unsafe schools performed worse than students who attended schools with better climates.

Although there were similarities between survey responses and interview participants, there was still a small number of teachers, based on averages, who believed school safety was a concern (12.5%). This may imply that schools need to ensure all staff members are trained on safety protocols in order to be diligent when emergencies arise. In this study, there was alignment between survey responses and those who participated in the interview. Bernardy and Schmid (2018) affirmed by voicing when teachers and students feel unsafe at school, they are not able to produce the greatest results.

Research Question 5

Research Question 5 was answered using a qualitative inductive thematic coding process based on 10 semistructured interviews with reading and math teachers from participating middle school campuses. Responses were organized into five major themes: administration support, voice in decision-making, relationships, learning opportunities, and student learning and support. Teacher responses to the interview questions

pertaining to administration support were consistent with reading and math teachers. Overall, administration support was identified as a major factor for influencing and supporting, not only student achievement, but teacher achievement as well. Based on participant responses, administration support consisted of administrators promoting academic success, providing feedback, assisting with analyzing data, communicating expectations, and growing teachers.

The second theme, voice in decision making, emerged as a result of participating teachers expressing whether or not they have input regarding decisions made at their campuses. In general, participants indicated that having voice was an essential factor for having a positive school climate. All math teachers and two reading teachers revealed that they do have a voice in decision-making, while three reading teachers believed their voice did not matter when it came to making decisions for the entire organization. They conveyed that massive decisions were left solely for administrators to problem solve and make decisions on.

Relationships surfaced when discussing how adults and students interact with one another in school. Overall, the consensus of teachers was that adults and students, for the most part, had positive interactions within the school. However, findings revealed that there is still need for improvement when communicating about teacher to student interactions and student to student exchanges. Participants accepted accountability for the need to build relationships with their students; however, only one teacher admitted to apologizing to students based on inappropriate responses when interacting with students.

Learning opportunities emerged based on questions asked about teaching and learning in the schools. In the current study, learning opportunities spoke to professional learning opportunities available to reading and math teachers. Based on responses provided, six teachers affirmed that information shared during professional development

and PLCs contributed to their professional knowledge and growth. Four teachers voiced concerns regarding lack of alignment to their subject area and absence of time to plan with their coworkers. Participants expressed a need to receive professional development on strategies to support struggling students.

Student learning and support surfaced as the final theme related to teaching and learning. Teachers shared their opinion regarding how students perceived learning and available supports to struggling students. In general, nine out of 10 reading and math teachers agreed that students care about learning and their achievement results, though lack of activities and character in the school could impact students' perceptions of the school environment. One reading teacher implied that students do not care about learning, as they do not take advantage of opportunities available to them at the school.

Implications

As a result of examining the relationship between teachers' perceptions of school climate and student achievement of middle school students, this study adds to previous research that states because the concept of school climate includes multiple factors, it has been restricted by neglecting to recognize which dimensions related to school climate influence student achievement (Astor & Benbenishty, 2018). This study's findings are useful to district and school leaders for understanding how teachers feel about school climate as it relates to student and teacher achievement. Previous research revealed that teachers perform better and have greater motivation when they work in environments where they feel safe and supported (Reaves & Cozzens, 2018).

Based on findings concluded from the current study, teachers believe that administration support is a major factor for influencing student achievement, communicating expectations, and growing teachers. This implies that district leaders need to ensure school leaders are equipped with the necessary training and support to

impact the climate on their campuses. Additionally, school leaders must understand that they are seen as the driving force to execute change and improve student achievement in their schools (Allensworth & Hart, 2018). Unless school administrators realize the importance of their role in improving schools, not only academically, but the school environment as well, they will not be able to impact positive change and growth on their campuses.

School administrators must stress the importance of building relationships on their campuses. Findings from this study reveal that while positive interactions between adults and students have been observed, the majority of participants indicated a need to improve in this area. School leaders must be clear when setting expectations around what positive interactions and relationships should look like within the school environment. Dissention amongst staff members, between teachers and students, and adverse interactions between students will negatively impact school climate and student achievement. As conveyed by Lin et al. (2020), relationships between teachers and students influence social skills and have been considered to have significant consequences on students' enthusiasm, engagement, and achievement. As communicated by Moses (2019), understanding social relationships in school environments is increasingly developing as an effective means to increase student achievement. School administrators should promote collaboration between staff, students, and parents to meet the objectives of the school.

In regard to teaching and learning, this study focused on teachers' professional learning, whether teachers believed students cared about learning, and opportunities available to support students experiencing academic difficulties. Findings in the current study indicated that 60% of the teachers believed campus professional development/PLCs added to their learning and growth as an educator, while 40% expressed concerns about alignment to what they needed to influence student achievement in their classrooms.

This implies that there is a need to implement professional development aligned to not only district goals, but campus goals and needs as well.

Districts should build in days where teachers are able to attend content-related professional development to impact teaching and learning in their classrooms in order to improve student learning outcomes. When there are designated hours for teachers to work together in PLCs, school administrators must allocate time for teachers to collaborate and plan for upcoming lessons. Items related to compliance can be shared via email or in a faculty meeting. Findings from the current study imply that some reading and math teachers consider PLCs a waste of time. If it is not aligned to what teachers need to influence teaching and learning in the classroom, they would rather spend this valuable time doing something more productive. Previous research indicated that when teachers collaborate to discuss student performance, there is a positive impact on student achievement (Mora-Ruano et al., 2019). Additionally, this study found that teachers do believe students care about their learning and want to perform well academically.

Finally, this study revealed that school safety was not an area of concern for most teachers who participated. When asking teachers to expound upon their survey responses to gain more clarity around their perceptions of safety, replies were brief, regarding feeling safe inside and outside of their campuses. Research showed that student achievement is affected when students feel unsafe in the classroom (Lacoe, 2020). This implied that teachers from participating schools did not feel safety impeded them from performing to their greatest abilities in the classroom. This finding also suggested that schools who participated in this study are prioritizing safety for teachers and students on their campuses.

There is a nationwide movement to improve school climate, therefore, it is imperative to define the concept clearly so that it can be measured accurately (Konold et

al., 2018). According to the Safe and Supportive Schools Model, which was developed by a national panel of researchers and professionals, positive school climate involves engagement, safety, and environment (NCSSLE, 2021). While the aforementioned may be defined in multiple ways, oftentimes these areas overlap in existing structures of school climate. Policy makers must enact policies that require districts and school leaders to implement practices that not only increase student achievement, but also ensure students are in safe and supportive learning environments. Process fidelity must be clearly defined by setting common guidelines that assure all schools in a district focus on specific measures that are nonnegotiable (Dunaway et al., 2014).

Strategic planning is essential in prioritizing school climate and ensuring goals of the district and schools are met. School districts must obtain the assistance of all stakeholders in working to meet the various needs of students. Funding must be set aside to train district office personnel and school leaders on school climate to impact student achievement. This would require districts to take risks and adjust as needed. As a result of there being several aspects of school climate, districts need to create planning groups that encompass district and school leaders to obtain feedback on which variables should be focused on, evaluated, and measured. Districts are always searching for ways to continuously improve schools, and while change is difficult, educators must continue to learn, find ways to reach all students, and become efficient in ensuring the whole child is supported.

Recommendations for Future Research

Findings from this study entailed obtaining quantitative and qualitative feedback from reading and math teachers. Although the findings provided data and information regarding teachers' perceptions of school climate, there are recommendations for future

research to expand upon the topic. The following recommendations are based on data and findings from this study.

This study took place in participating middle schools located in a large urban school district in the Southwestern region of the United States. Consequently, results cannot be inclusive of other environments and are only applicable to similar campuses where demographics and size mirror that of the current study. Collecting data from a larger population and sample could potentially produce different results. A recommendation for future research would be to include more middle schools or schools at different levels, in the participating district, to gain further insight and an accurate representation of teachers' perceptions across the district. Because school climate encompasses multiple dimensions, a recommendation for future research would be to gain insight from teachers and leaders regarding what factors of school climate they believe impact student achievement prior to collecting data. This approach could generate different results as well. Finally, in evaluating school climate, data should be collected from students to evaluate administration support, building relationships, teaching and learning, and school safety in their respective schools. This type of research could provide additional awareness, based on students' perceptions, of the relationship between school climate and student achievement on students' campuses.

Conclusion

The topic of school climate and student achievement has been well researched. There has been a nationwide movement to enhance school climate and, despite the accumulation of studies related to the advantages of a positive school climate on student achievement, there are inconsistencies regarding which factors of school climate actually influence student achievement (Konold et al., 2018). School climate has been identified as the character of school life which impacts student and adult experiences within schools

(Davis & Warner, 2018). Given that several studies have been conducted around school climate and student achievement with varying results, further research is needed on the topic. Additionally, because states are holding schools accountable for not only student achievement, but for improving school climate as well (Temkin et al., 2021), this study could provide significant contributions, not only to school administrators, but to the global discussion on the relationship between school climate and student achievement.

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APPENDIX A:

SURVEY COVER LETTER

April 3, 2022

Dear Teacher:

Greetings! You are being solicited to complete the *New Jersey School Climate Survey*. The purpose of this survey is to assist with examining the relationship between teacher's perceptions of school climate and student achievement of middle school students. Your answers to these questions will assist with understanding the relationship amongst these variables.

Please try to answer all the questions. Filling out the attached survey is entirely voluntary; however, answering each response will make the survey most useful. This survey will take approximately 10 minutes to complete, and all of your responses will be kept completely confidential. Since the survey is voluntary, you may stop your participation at any time. In addition, you will not directly benefit from this survey, but you are providing valuable data regarding school climate and student achievement.

Your cooperation is greatly appreciated and your willingness to participate in this study is implied if you proceed with completing the survey. Your completion of the survey is not only greatly appreciated, but invaluable. If you have any further questions, please feel free to contact me. Thank you!

Sincerely,

Tanya Edwards University of Houston-Clear Lake Edwardst8762@uhcl.edu

APPENDIX B:

SCHOOL CLIMATE SURVEY - SCHOOL STAFF

Purpose: This survey examines what you think about your school. The information from the survey will be used to improve student relationships, learning conditions, and the school's overall environment.

Although you are providing your name, your answers are confidential and will be combined with other school staff. No one will be told how you answered. This survey is voluntary. You do not have to answer any question if you do not want to, but I hope you will answer as many questions as you can.

Instructions: Please read each question carefully and circle/click the number under the <u>one</u> answer that most closely fits your opinion. We appreciate your taking the time to do the survey.

	Please indicate how much you agree or disagree with	SD	D	A	SA
	the following statements about your school.	1	2	3	4
	1=Strongly Disagree (SD); 2=Disagree (D); 3=Agree (A); 4=Strongly Agree (SA)				
	Administration Support			•	
1.	School administrators give me useful feedback on my teaching.	1	2	3	4
2.					
3.	School administrators communicate effectively with 1 2 others from diverse backgrounds.				
4.	School administrators follow through on commitments.		2	3	4
5.	School administrators involve teachers in decision making and problem solving.		2	3	4
6.	School administrators and staff communicate with each other effectively.		3	4	
7.	School administrators promote the success of all students.	1	2	3	4
8.	School administrators hold themselves to the same high expectations as others.	1	2	3	4
9.	School administrators back me up when I need it.	1	2	3	4
10.	School administrators are aware of what goes on in the classrooms.	1	2	3	4
	Relationships				
11.	At this school, teachers are treated and respected as educational professionals.	1	2	3	4

12.	At this school, it is common for students to tease and insult one another.	1	2	3	4	
13.	Parents respect their children's teachers.	1	2	3	4	
14.	*	1	2	3	4	
15.	Adults who work in this school treat students with respect.		2	3	4	
13.	Adults who work in this school typically work well with one another.	1	2	3	4	
16.	Many students at this school go out of their way to treat	1	2	3	4	
	other students badly.					
17.						
18.	Students in this school respect each other's differences	1	2	3	4	
	(for example, gender, race, culture, etc.)					
19.	This school staff respects and embraces diversity.	1	2	3	4	
Teaching and Learning						
20.	Students at this school don't care about learning.	1	2	3	4	
21.	The school community has high expectations of all	1	2	3	4	
	students.					
22.	Students at this school get the chance to work	1	2	3	4	
	independently.					
23.	Some students at this school just cannot be motivated to	1	2	3	4	
	do the work.					
24.	Students at this school are encouraged to think critically.	1	2	3	4	
25.	I have access to the tools I need to do my job.	1	2	3	4	
26.	I am dissatisfied with opportunities for my professional	1	2	3	4	
	growth.					
27.	The best teachers and staff are retained at this school.	1	2	3	4	
28.	I do not have enough autonomy over my classroom.	1	2	3	4	
29.	This school encourages students to get involved in	1	2	3	4	
	extracurricular activities.					
	Safety					
30.	I feel safe outside on the school grounds.	1	2	3	4	
31.	I feel safe in the hallways and bathrooms.	1	2	3	4	
32.	I feel safe in the classrooms.	1	2	3	4	
33.				3		

34. What middle school do you currently teach in?

- a. Baylor College of Medicine Academy at James D. Ryan
- b. Baylor College of Medicine Biotech at Rusk
- c. Hartman MS
- d. Pershing MS
- e. Tanglewood MS

f.	Other:	

35. What subject area do you teach?
36. Your grade level: a. 6 th b. 7 th c. 8 th
 37. Which category below describes your years of teaching experience? a. 1-5 Years 6-10 Years b. 11-20 Years c. Over 20 Years
38. What is your ethnicity? a. African American b. Asian, Asian American c. Hispanic or Latino (a) d. Native American/Alaska Native e. White f. Other (Please specify)
39. What is your gender? a. Male b. Female
 40. Which category below includes your age? a. 20-29 b. 30-39 c. 40-49 d. 50-59 e. 60 or older
41. Please indicate if you would be interested in participating in a brief interview to expound upon your answers.a. Yesb. No
42. Your Name (your name will be kept confidential)
43. Email Address (email address will be kept confidential)

APPENDIX C:

INFORMED CONSENT TO PARTICIPATE IN RESEARCH

You are being asked to participate in the research project described below. Your participation in this study is entirely voluntary and you may refuse to participate, or you may decide to stop your participation at any time. Should you refuse to participate in the study, or should you withdraw your consent and stop participation in the study, your decision will involve no penalty or loss of benefits to which you may otherwise be entitled. You are being asked to read the information below carefully and ask questions about anything you don't understand before deciding whether or not to participate.

Title: Examining the Relationship Between Teacher's Perceptions of School Climate and Student Achievement of Middle School Students

Principal Investigator(s): Tanya Edwards, M. Ed.

Student Investigator(s): Tanya Edwards, M. Ed.

Faculty Sponsor: Antonio Corrales, Ed.D.

Purpose of the Study: The purpose of this study is to examine the relationship between teacher's perceptions of school climate and student achievement of middle school students.

Procedures: Surveys and Interviews

Expected Duration: The total anticipated time commitment will be approximately 35 minutes.

Risks of Participation: There are no anticipated risks associated with participation in this study.

Benefits to the Subject

There is no direct benefit received from your participation in this study, but your participation will help the investigator(s) to better understand if there is a relationship between school climate and student achievement of middle school students.

Confidentiality of Records

Every effort will be made to maintain the confidentiality of your study records. The data collected from the study will be used for educational and publication purposes, however, you will not be identified by name. For federal audit purposes, the participant's documentation for this research project will be maintained and safeguarded by the Principal Investigator for a minimum of five years after completion of the study. After that time, the participant's documentation may be destroyed.

Compensation

There is no financial compensation to be offered for participation in this study.

Investigator's Right to Withdraw Participant

The investigator has the right to withdraw you from this study at any time.

Contact Information for Questions or Problems

If you have additional questions during the course of this study about the research or any related problem, you may contact the Principal Investigator, Tanya Edwards, by telephone at 832-641-5007 or by email at EdwardsT8762@uhcl.edu. The Faculty Sponsor, Dr. Antonio Corrales, may be contacted by telephone at 281-283-3588 or email at corrales@uhcl.edu.

Identifiable Private Information

Information or biospecimens collected as part of the research, even if identifiers are removed, will not be used or distributed for future research studies.

Signatures

Your signature below acknowledges your voluntary participation in this research project. Such participation does not release the investigator(s), institution(s), sponsor(s) or granting agency(ies) from their professional and ethical responsibility to you. By signing the form, you are not waiving any of your legal rights.

The purpose of this study, procedures to be followed, and explanation of risks or benefits have been explained to you. You have been allowed to ask questions and your questions have been answered to your satisfaction. You have been told who to contact if you have additional questions. You have read this consent form and voluntarily agree to participate as a subject in this study. You are free to withdraw your consent at any time by contacting the Principal Investigator or Student Researcher/Faculty Sponsor. You will be given a copy of the consent form you have signed.

Subject's printed name:
Signature of Subject:
Date:
Using language that is understandable and appropriate, I have discussed this project and the items listed above with the subject.
Printed name and title:
Signature of Person Obtaining Consent:
Date:

THE UNIVERSITY OF HOUSTON-CLEAR LAKE (UHCL) COMMITTEE FOR PROTECTION OF HUMAN SUBJECTS HAS REVIEWED AND APPROVED THIS PROJECT. ANY QUESTIONS REGARDING YOUR RIGHTS AS A RESEARCH SUBJECT MAY BE ADDRESSED TO THE UHCL COMMITTEE FOR THE PROTECTION OF HUMAN SUBJECTS (281.283.3015). ALL RESEARCH PROJECTS THAT ARE CARRIED OUT BY INVESTIGATORS AT UHCL ARE GOVERNED BY REQUIREMENTS OF THE UNIVERSITY AND THE FEDERAL GOVERNMENT.

(FEDERALWIDE ASSURANCE #FWA00004068)

APPENDIX D:

INTERVIEW PROTOCOL

Teacher's Perceptions of School Climate Factors that Influence Student Achievement

Hello, my name is Tanya Edwards. Thank you for agreeing to meet with me today. I really appreciate your time to provide input regarding school climate factors that influence student achievement. In order to ease the interview process, I am using a third-party source to record and transcribe our conversation. If at any time you would like the interview to cease, please let me know. Do I have permission to record our interview? If you have not done so, please email me the signed consent form. Do you have any questions before we start?

Introduction: Introduce yourself.

- 1. Describe your school (characteristics: school type, extracurricular, etc.).
- 2. How do you know you are doing well in your school?
- 3. Do you feel like you have a voice in decision-making? Why or why not?
- 4. Do you feel there is a relationship between administration support and student achievement? Why or Why not?
- 5. Can you describe typical interactions between adults and students in your school?
- 6. Are there opportunities for collaboration at your school? In PLCs?
- 7. Is on-campus professional development and/or PLCs aligned to professional learning/growth? Why or why not?
- 8. How do students interact with each another in the school?
- 9. Do students care about learning in the school? Why do you feel this way?
- 10. What opportunities are available to support students who are struggling academically?
- 11. Do you feel safe when you're at school? Why or why not?
- 12. If you could change one thing about your school, what would it be and why?

Participant demographics:

- a. What grade level do you teach?
- b. What school are you currently teaching in?
- c. What subject area do you teach?
- d. In what areas do you hold certifications?
- e. How long have you been teaching?
- f. What race/ethnicity do you identify with?
- g. Do you consider yourself male/female?
- h. What is your age?