A CAUSAL COMPARATIVE STUDY OF TEACHER AND ADMINISTRATOR
PERCEPTIONS OF SCHOOL CLIMATE WITHIN ELEMENTARY
SCHOOLS IN A SCHOOL DISTRICT

by

Clyde Reginald Alston

Liberty University

A Dissertation Presented in Partial Fulfillment
Of the Requirements for the Degree

Doctor of Education

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APPROVED BY:

__________________________
Kenneth Gossett, Ph.D., Committee Chair

__________________________
Lisa Schlabra, Ed.D., Committee Member

__________________________
Charles K. Smith, Ph.D., Committee Member
ABSTRACT

A school’s climate either positively or negatively affects teaching and learning within the school. School administrators have the responsibility to ensure the school climate supports both. This responsibility can only be met when school leaders have an accurate understanding of climate in the schools they serve. This causal-comparative study examines administrators’ and teachers’ perceptions of school climate among the academic, social, affective, and physical domains of school climate, as measured by the revised School Level Environment Questionnaire (r-SLEQ). Data were examined using an independent samples t-test to determine whether statistically significant differences in school climate perceptions exist between administrators and teachers on school climate overall and also uses an independent samples t-test to determine if differences exist on individual climate domains. Independent samples t-tests indicated significant differences (p<.05) in perceptions of school climate between administrators and teachers in the academic, social, and affective domains. This study is important because it helps bridge the gap between previous school climate research and school leadership practice by examining why this gap exists, by exploring differences in school climate perceptions between teachers and administrators. Findings are presented and discussed with potential implications for school administrator training and development programs, and further research. The setting for this study is twenty-three elementary schools in a Virginia school district, each served by a principal/assistant principal administrative leadership team, and 25 – 40 classroom teachers per school.

Keywords: school climate, teacher-principal perceptions, revised School Level Environment Questionnaire (r-SLEQ)
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Dedication

This dissertation is dedicated to my wife, Charisse Lonette Alston.

Also to my children Amber, Jonathan and Reyna.
Acknowledgments

To the Peppers of Wilson, NC and the Alstons of Warren County, NC for being my backbone, upon whose shoulders I stand. To my grandmother, Mary H. Peppers, entrepreneur, matriarch, and the strongest advocate for education I have ever known. To my grandfather, Charlie G. Alston, the grandson of slaves; known for never missing a teacher conference or parent meeting for his children, including my father.

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To my fellow educators, I am proud to share membership in the greatest profession. And to my students for inspiring me to work each day with passion, pride and purpose.

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To my big brother Joseph R. Bynum. To my queen, Charisse L. Alston.

And to the lost, tired, heart-broken, discouraged, a singular Name above all names.
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List of Abbreviations

Institutional Review Board (IRB)
Mean (M)
Null Hypotheses (H)
Research Question (RQ)
Revised School Level Environment Questionnaire (r-SLEQ)
CHAPTER ONE: INTRODUCTION

Background

In the field of education, everything rises and falls on leadership. In schools, this includes the school’s climate, the environmental and contextual conditions for teaching and learning (Tableman & Herron, 2004). The research on school climate supports its relevance as a factor in student achievement (Thapa & Cohen, 2012). As such, understanding, shaping, and responding to school climate is an important aspect of the principal’s and assistant principal’s role as the instructional leadership team within their school buildings, precisely because of the critical role school climate plays in student achievement. If, according to Kelly, Thornton, and Daughtery (2005), educational leadership is the most important single determinant of an effective learning environment, administrators must demonstrate both awareness of and dexterity with school climate.

The climate for teaching and learning within schools is not a new phenomenon. Educators have recognized its importance for over 100 years, and scholars have studied school climate for at least 50 years (Cohen & McCabe, 2009). Since the publication of Anderson’s seminal work, “The Search for School Climate” in 1982, educators have continued to recognize school climate as an influential factor in student achievement. More recently, a survey of principal and superintendents from across the United States indicates school climate remains an area of high interest, with 82% indicating that school climate was either extremely important or very important (Cohen & McCabe, 2009).

However, the fact that educators have recognized school climate as important does not seem consistent with the some of the realities facing today’s schools. Retention of highly
qualified teachers is a major problem in schools, especially urban ones (Mitchell, Bradshaw, & Leaf, 2010). According to the National Commission on Teaching and America’s Future, within ten years of starting careers, approximately 50% of teachers leave the profession. These teachers who leave the profession often cite climate conditions such as poor working environments, lack of support, and lack of resources (Wallace Foundation, 2011). In a study of 50 first and second year teachers, Kardos and Johnson (2001) found that many teachers, especially new ones, are provided with little professional support or feedback from administrators, thus leading to feelings of disillusionment.

Teachers require supportive academic, social, affective, and physical environments to successfully implement the teaching strategies necessary to educate children and to meet increasing standards (Tableman & Herron, 2004). If indeed everything rises and falls on leadership, it is up to the building administrators to ensure the school’s climate is conducive to student learning. Urick and Bowers (2011) note that administrators influence teachers and teaching practice because of the organizational climate they create, not through specific interactions or interventions. MacNeil, Prater, and Busch (2009) report the principal’s impact on student learning mediates indirectly through the climate of the school. According to Berson (2015) the “cognitive, motivational, and affective state” of the school is mediated through the school’s administrative leadership (Berson & Waldman, 2015, p. 83). If principals must demonstrate awareness of and dexterity with school climate, then the former necessarily precedes the latter.

Maslow’s hierarchy of needs and Herzberg’s theory of motivation are the theoretical underpinnings for this study. Both theorists describe human motivation; Maslow describes the
phenomenon generally and Herzberg within the context of work (school) (Stello, 2012). School climate is framed as a motivational factor impacting work behavior and effectiveness. The decisions of school leaders impact school climate and also impact the work environment for teachers (Jain & Cohen, 2015). Both Maslow and Herzberg have theorized that these work environments impact teacher motivation and ultimately teacher success at teaching and learning (Huit, 2007). This study investigates the principal’s effectiveness at recognizing school climate as perceived by teachers. The capacity to accurately assess school climate is the first step towards equipping school leaders to act to promote teacher motivation, effectiveness, and ultimately student learning, by maximizing school climate (Alridge & Fraser, 2016). Each research question examines the capacity of school leaders to accurately assess school climate, within the context of teachers’ perceptions, in the schools they share.

**Problem Statement**

Although, school climate has been studied for many years, there is a gap between school climate research findings and school improvement practice (Cohen & McCabe, 2009). Keiser and Schulte (2010) state that it is not enough for school leaders to informally assess school climate; assumptions lead to a distorted sense of the school community and impact organizational effectiveness. According to MacNeil et al. (2009), “when the complex patterns of beliefs, values, attitudes, expectations, ideas and behaviors in an organization are inappropriate or incongruent” the school is unsuccessful at impacting learning (p.74). This study is intended to bridge the gap between two persistent themes in school climate and school improvement research literature, from which this problem is identified. The first theme is that school climate is correlated to student achievement (MacNeil, 2009; Ding, 2011; Urick, 2011;
Thapa & Cohen, 2012). The second theme is that the single most important determinant of school success is leadership (Black, 2010; Berson & Waldman, 2015). However, poor school climates render these two themes irreconcilable, since effective leadership is responsive to changing circumstances (Velasco, Edmonson, & Slate, 2013; Bernhardt, 2016), and thus illustrates the problem and justifies the research question. A gap exists between previous school climate research and school improvement practice. The problem is that despite previous education research about maximizing school climates, negative school climates persist in schools, with differences between teacher - administrator perceptions overlooked as a contributing factor.

**Purpose Statement**

The purpose of this causal-comparative study is to examine the differences between teacher and administrator perceptions of school climate, to determine if differences are an explanatory factor preventing school leadership from taking action to maximize school climate. Framing school climate as a motivational or hygiene factor, this study measures whether or not teachers and administrators differ in their perceptions of school climate, defined as the environmental and contextual conditions for teaching and learning within their schools (Tableman & Herron, 2004). Group assignment (teacher or administrator) is the *independent variable* and r-SLEQ survey responses are the *dependent variables*. The discussion of findings discusses discrepancies between teacher and principal perceptions of climate overall and within specific components of school climate. Teachers and administrators (principals and assistant principals) at 23 elementary schools in a Virginia school district were surveyed using the revised School Learning Environment (r-SLEQ) (Johnson & Stevens, 2007). Their responses were
analyzed to determine if they differ significantly on school climate perceptions overall, and along school climate domains: academic, social, affective, and physical, or if differences are attributable to statistical sampling error.

**Significance of the Study**

Ding (2011) as well as various other researchers make a strong empirical case connecting school climate to student achievement. If school leaders are interested in maximizing achievement, understanding and responding to school climate is essential. This study is significant because it will help close the “glaring gap between school climate research findings and policy, school improvement practice and teacher educator efforts” (Center for Social and Emotional Education, 2011, p. 7). This gap persists as evidenced by the ongoing efforts to improve the capacity for data-driven decision-making and evidenced-based processes to inform school leaders to improve school climate (Zullig, Colllins, Ghani, & Hunter, 2015). The research literature acknowledges that we are still in the process of understanding the relationship between leadership and school climate. There are multiple complex forces at work in this relationship, but principal attunement to the viewpoints and perspectives of school community members is recognized as a variable that needs to be understood specifically (Cohen & McCabe, 2009). This study seeks to provide knowledge aimed at closing this identified gap between school climate research and school improvement practice, by using a quantitative methodology to describe perceptual discrepancies between teachers and administrators. If indeed paying attention to school climate conditions is the most important action that a leader can perform, this study could provide some additional justification for professional development at the school and district levels for administrative leadership training on recognizing and influencing school
climate to maximize student learning, (MacNeil, Prater, & Busch, 2009; Zullig, Collins, Ghani, & Hunter, 2015). If lack of administrative attunement to teachers’ perceptions of school climate restricts the effectiveness of school leadership, and is also explanatory of the gap between school climate research and practice, then professional development must begin with accurate recognition of the school climate teachers experience (Berson & Waldman, 2015).

**Research Question**

This study is designed to answer the following research question (RQ):

**RQ1.** Is there a statistically significant difference between teacher and administrator perceptions of school climate (e.g. academic environment, social environment, physical environment, and affective environment), as measured by the revised School-Level Environment Questionnaire (r-SLEQ)?

**Null Hypotheses**

This study is designed to test the following five null research hypotheses:

**H₀₁:** There is no statistically significant difference between teacher and administrator perceptions of overall school climate as measured by the revised School-Level Environment Questionnaire (r-SLEQ).

**H₀₂:** There is no statistically significant difference between teacher and administrator perceptions of the academic environment as measured by the revised School-Level Environment Questionnaire (r-SLEQ).
H₀₃: There is no statistically significant difference between teacher and administrator perceptions of the *social environment* as measured by the revised School-Level Environment Questionnaire (r-SLEQ).

H₀₄: There is no statistically significant difference between teacher and administrator perceptions of the *affective environment* as measured by the revised School-Level Environment Questionnaire (r-SLEQ).

H₀₅: There is no statistically significant difference between teacher and administrator perceptions of the *physical environment* as measured by the revised School-Level Environment Questionnaire (r-SLEQ).

**Definitions**

1. *Administrator* – State-licensed administrator serving in a public school as principal or assistant principal (Virginia Department of Education, 2013)

2. *Hygiene factors* - External working conditions, quality of supervision, salary, status, safety, job, company policies and administration, interpersonal relations (Yusoff & Kian, 2013)

3. *Motivation factors* - Intrinsic work factors including achievement, recognition for achievement, responsibility for task, advancement to higher level tasks, professional growth opportunities (Yusoff & Kian, 2013)

5. *Teacher* – Any individual licensed by the state to provide instruction in the public school setting and serving in this capacity in a school (Virginia Department of Education, 2013)
CHAPTER TWO: LITERATURE REVIEW

Overview

This review of the literature indicates that school climate affects teacher motivation, effectiveness, and in turn, the capacity to positively impact student learning and achievement. For schools to maximize their effectiveness, educators must understand the nature and complexity of the school’s climate and possess the ability to effectively respond to it at both the school and district level. This literature review presents the findings of studies investigating school climate. After discussing a theoretical framework, the review of the literature identifies themes and findings from previous studies, and describes an under-researched gap in the research literature, this study is designed to help close.

Theoretical Framework

Maslow’s hierarchy of needs and Herzberg’s two-factor theory provide the theoretical basis for this study. Maslow posits that motivation can be organized into five levels: physiological needs, safety needs, love and belonging needs, self-esteem needs, and ultimately, the need for self-actualization (Maslow, 1943). Lower levels must be satisfied before higher level needs can be met. For example, basic survival needs such as safety and shelter are met before self-esteem (Bowditch & Buono, 2001). According to Maslow’s theory, when lower-level needs are satisfied, people ultimately seek self-actualization, a state characterized by realizing one’s inner potential, creativity and meaning (Maslow, 1943). The idea that schools that are safe, orderly, and promote collegiality are more successful at educating students runs
parallel to this theory. In such an environment or climate, the conditions that promote teacher effectiveness are present.

According to Latham and Pinder (2005), motivation is a psychological process resulting from the interaction between the individual and the environment. Therefore, the circumstances of the workplace has an impact on one’s perception that their needs, as articulated by Maslow, are met, thus impacting motivation towards achieving learning goals for students (Bowditch & Buono, 2001). Also, physiological needs are reflected in factors like space, lighting, and overall working conditions; safety in terms of work practices; love in regard to forming cohesive work teams; esteem through responsibility and recognition; and self-actualization in terms of opportunities for creative and challenging jobs and tasks (Latham & Pinder, 2005). Maslow’s higher level needs are aligned with the characteristics displayed by effective teachers, including confidence, respect, and creativity (Huitt, 2007).

The health of the school’s climate is predictive of the health of the school, as measured by student achievement (Sherblom, Marshall, & Sherblom, 2006). Sherblom et. al (2006) study correlated school climate indices such as feelings of belonging and school expectations to reading and or math achievement, at significance levels $p<.05$ in 44 of 54 instances (Sherblom, Marshall, & Sherblom, 2006). Previous studies on school climate have also described the connection empirically between perceptions of school climate and student achievement (Thapa & Cohen, 2012). However, the failure of school reform efforts has been attributed to a lack of understanding of school climate (MacNeil, Prater, & Busch, 2009). This study seeks to better understand one variable at work in the climate - achievement relationship; the relationships between administrator and teacher perceptions.
Anderson (1982) asserts that climate is perceived relatively the same way by all members of the school community, but if teachers and administrators perceive the school’s climate differently, this could be related to teachers’ negative perceptions of the overall school climate. This could be problematic, especially to the extent discordant perceptions are indicative of unresponsive or ineffectual leadership in the school. Conversely, in schools where the administrative leadership is attuned to teacher perceptions of climate, this could facilitate responsiveness, and ultimately a more conducive climate for teaching and learning. According to Sanzo (2011) “there is not a single documented case of a school successfully turning around its pupil achievement trajectory in the absence of talented leadership” (p. 32). This study is designed to advance knowledge in the field of educational leadership by helping to define this talent, specifically related to awareness and responsiveness to school climate.

Herzberg’s two-factor theory expounds upon Maslow by describing motivation within the parameters of the work environment, or school. Like Maslow, Herzberg relates human motivational factors to both physiological and psychological needs that are systematically connected. After physiological needs are met, such as salary and safety, higher order psychological needs can then also be met, such as the need to achieve and find purpose in one’s work. Herzberg relates this motivational framework to the work (school) environment by identifying specific motivational and hygiene factors, within the school, that lead to either satisfaction or dissatisfaction (Lazenby, 2008).

Among the factors leading to dissatisfaction are company policies, work conditions, salary, and peer relationships (Lazenby, 2008). Factors leading to satisfaction include intrinsic reward provided by the work itself, responsibility, advancement, growth, and recognition. These
factors do not exist on a continuum, where an increase in dissatisfaction results in increased satisfaction, or vice versa (Lazenby, 2008). To effectively manage the school’s climate, school administrators must both recognize and attend to both sets of Herzberg’s factors. The factors identified by Herzberg (leading to dissatisfaction and satisfaction) are imbued throughout the various elements of the school’s climate. Also, the capacity of principals to address both the content and context of the work in schools is directly tied to their assessment of the school’s climate (they must recognize before they can attend to it) (Chenowith & Theokas, 2013). To align with Herzberg’s theory of motivation, management (administrators) must manage to avoid dissatisfaction, but also provide teachers opportunities to achieve satisfaction in their work with students (Buckingham & Coffman, 1999). Although some critics of Herzberg state that job satisfaction does not necessarily imply a high level of motivation or productivity, the nexus between positive school climate and student achievement is supported by the research literature in education (Thapa & Cohen, 2012). The principal who “listens to, supports, and empowers faculty is likely to lead teachers with lower levels of isolation, higher job satisfaction, and a greater likelihood of staying in the field” (Sass, Seal, & Martin, 2011, p. 212).

However, this study must acknowledge that Herzberg first presented his theory of motivation in 1959, over 50 years ago. The passing of time has afforded scholars the opportunity to test the theory and its value as a theoretical framework, with both supporters and detractors. Recently, Stello (2012) sought to determine if two-factor theory had been validated by the literature, and if it was “still relevant in the more complex and diverse workplace of today (Stello, 2012, p. 18).” While finding the theory could be questioned empirically, she concluded
Herzberg’s two-factor theory should not be dismissed, deriving value from “standing the tests of time, and also integrating itself into managerial practice” (Stello, 2012, p. 25).

Yusoff and Kian (2013), also examined the applicability of Herzberg’s theory and its relevance for the contemporary work environment. Researchers examined supervision (as a hygiene factor) and its relationship to job satisfaction. Their study cited strong job satisfaction was linked to positive interactions with superiors. Trust, confidence, and respect between leaders and followers lead to strong relationships and productive working environments (Yusoff & Kian, 2013). Effective school principals in particular, are described as having “an assured ability to accurately perceive the strain experienced by their colleagues” (Harazd, 2012, p. 65). When it comes to organizational (school) climate, this study seeks to better understand these supervisor-subordinate relationships by examining the views of each and their respective perceptions of the school’s climate. The discussion of findings will discuss these hypotheses; where relationships are positive between teachers and principals, their perceptions of school climate are more closely matched, which could be correlated to higher school achievement. Where the relationships are strained, perceptions of school climate might also be incongruent, and indicative of lower student achievement.

**Related Literature**

**Organizational Climate**

Organizational theorists define organizational climate as the summary of perceptions of the organization’s “atmosphere and environment,” with implications for organizational and job satisfaction, performance, group interaction, and withdrawal behaviors (e.g. absenteeism and turnover) (Bowditch and Buono, 2001). Schools in particular, are complex organizations with
teachers, students, parents, administrators, and other stakeholders working collaboratively toward achieving the mission of student learning. Within this collaborative milieu, there are numerous factors influencing the perceptual assessment of the school’s climate. Parker, Grenville, and Flessa (2011) describe school climate as being the heart of a successful school, characterized by “excellent teaching, high-quality leadership, motivated staff and students, and a sense of community” (Parker, Grenville, & Flessa, 2011, p. 130).

Perceptions of organizational climate influence the performance of the organization and affect the bottom line, whether it is a Fortune 500 company, a start-up, a not-for profit, or a school. The following discusses research investigating the connection between school climate and achievement from previous research.

**School Climate**

School climate is the summary of perceptions of the school’s environment and refers to the “physical and psychological preconditions necessary for learning to take place” (Tableman & Herron, 2004, p. 36). Although school climate and culture are often used interchangeably, there are important differences (Bowditch & Buono, 2001). School culture refers to the distinct identity of the school, its shared ideas, values, and beliefs. School climate, on the other hand, describes how the school experience is internalized or perceived by its community members; their feelings and attitudes about the school (Sherblom, Marshall, & Sherblom, 2006). School climate is the school’s tone and atmosphere. Rafferty (2003) depicts the social climate as “concealed within and throughout the observable measurable barriers to educational effectiveness” (p.51). Rafferty’s study surveyed educators in twenty-six high schools finding
statistically significant relationships between school climate and perceptions of principal communication, suggesting a relationship (Rafferty, 2003).

Schools are complex organizations where climate impacts the capacity to achieve the mission of teaching and learning. According to MacNeil, Prater, and Busch’s (2009), school climate is cited as among the top influencers on student achievement. The administrative leadership teams within schools must demonstrate competency with school climate to realize the goals of teaching and learning. A review of the recent research literature comprises studies that discuss the administrative leadership’s role in fostering positive and productive academic, social, affective, and physical climates in schools. Divergence between the perceptions of administrators and teachers create gaps and these gaps, left unchecked, stifle the school’s capacity to achieve the mission of teaching and learning in different ways. In fact, successful school leaders are responsive to and shape the school’s climate.

Parker, et. al (2011) utilized a qualitative methodology to explore stories of success of schools affected by poverty. Of interest to the researchers was how programs were implemented and why the school’s programmatic direction was selected. Several themes reflective of school climate emerged from their inquiry including a commitment to high-quality collaboration, and administrative leadership or culture of leading. According to Parker et. al., (2011), principals who lead successfully do so because they are engaged with the work of teaching and learning and, as one principal stated, “I can relate. I hear them.” (Parker, Grenville, & Flessa, 2011, p. 144).

Black’s (2010) analysis correlated leadership practices and perceptions of school climate. Findings indicated a strong association between leadership traits and positive school climates.
Specifically, the traits with the highest correlation were values people and supportive (.66), followed by builds people and collegial (.54) (Black, 2010). Black suggests that principals wanting to improve their school climates should utilize servant leadership. These findings underscore the importance of principal responsiveness to the needs of teachers.

Conversely, unresponsive school climates have negative effects, for example, on teacher turnover, and ultimately student learning. Ronfeldt’s (2013) study of teacher turnover of over 850,000 fourth and fifth grade students in New York City indicated that students in grade-levels with higher turnovers experienced lower achievement in both language arts and math. Ronfeldt’s study also reported that these results are particularly strong in schools with more low-performing, at-risk students.

The nexus between climate and achievement is widely accepted, however, there is lack of agreement over what constitutes school climate, and further, the interplay among climate variables (Johnson & Stevens, 2006). Cohen (2009) stated “there is not one universally agreed-upon definition of school climate,” and scholars and theorists have defined school climates using various constructs (p. 182). Black (2010) agrees, stating that “like all constructs in social science,” definitions are arbitrary and subjective (p. 438). However, there are at least four dimensions of school climate that organize various definitions into four main categories for this study: the academic climate, the social climate, the affective climate, and the physical climate (Tableman & Herron, 2004). These dimensions of school climate correspond to the four pathways through which school leaders influence student learning and achievement outcomes. Nir and Hamieri (2014) described the following pathways: teachers’ pedagogical proficiency influenced through school principals’ problem-solving capacities and knowledge of relevant
leadership and pedagogical practices (academic climate); the emotional path, referring to teachers’ perceived emotional state influenced through the extent to which the principal inspires and supports teachers (affective climate), and the organizational path, referring to the “formal structure of the school and the organization of work processes and procedures” (social/physical climates) (p. 211). The four components of school climate (academic, social, affective, and physical) are interrelated and interact with one another (Tableman & Herron, 2004), as the following discussion of each addresses.

**Academic domain**

The academic climate is oriented around teaching and learning. Productive academic climates are student-centered; expectations are high for all students to succeed. Interventions are in place to help students who are struggling. In positive academic climates, teaching methods reflect the belief that all students can and will learn (Tableman & Herron, 2004). For example, supportive teaching practices are in place promoting persistence, constructive feedback, and rigor. Students are provided individual feedback, and administrators and teachers are held accountable for the learning of individual students. Also, students are afforded an opportunity to demonstrate their knowledge and skills in a variety of ways. Technologies, such as mobile phones, are used to make learning more efficient through the use of instructional applications, or administrative tasks in support of teaching and learning, including assessment, research, and collection of data (Thomas & O’Bannon, 2014).

Within positive academic climates, academic achievements of the school and classrooms are supported and recognized. In addition, student progress is promptly reported to students and parents. Pockets of achievements, whether among classrooms, or within classrooms are studied
and replicated. Also, the academic climate has been identified as an influential factor on climate perceptions overall. Benbenisty and Astor’s (2016) study of the link between school climate, school violence, and the school’s general academic performance over time, using a survey instrument (California Healthy Kids Survey), found “credible evidence” that a school’s overall academic climate was a causal factor in reduction of school violence and improved overall climate perceptions.

Current research literature provides examples of studies that support the academic environment – achievement connection, as well as the impact of school leadership on shaping it. Kraft and Papay’s (2014) study of the variation in teacher effectiveness and improvement over time indicated that teachers working in supportive professional environments improve their effectiveness, compared to less supportive environments. The results of this study also highlight some of the areas where a supportive academic climate, facilitated by the administrative leadership team, facilitates student achievement. For example, a supportive academic environment, as described in this study, facilitates a focus on learning. This is embodied by an exchange of ideas and collaboration about teaching and learning, as the core of the school’s academic environment. Teachers’ perceptions of administrative support of the academic climate are directly linked to the visible actions of school leaders, and whether or not these actions are perceived to be positive or negative. For example, teachers’ perceptions of school climate influenced their ability to implement school-based character and development programs (Thapa & Cohen, 2012).

In supportive academic environments, teachers share their instructional expertise with their colleagues through avenues such as collaborative planning, novice teacher mentorships, and
professional development. According to Moore-Johnson, “at any one time, in any school some teachers are more knowledgeable, experienced and skilled than others” and “schools function best when they continuously leverage teachers expertise so that all students in all classrooms are well–served ” (Moore-Johnson, 2015, p. 117). To achieve this, first the school leadership must communicate that high academic standards are the expectation. Second, the school’s administrative leadership must institute organizational procedures and structures that foster collaboration and collegiality. Leaders must have familiarity with the academic climate, so that adjustments can be made to ultimately achieve the goal of productive teacher collaboration.

Also, new and evolving standards for what students should know and be able to do at each grade level, embodied by national initiatives such as Common Core (currently adopted by 43 states) have re-ignited the focus on the school’s academic environment (Common Core State Standards Initiative, 2015). The shifts in standards and the commensurate shifts in paradigms as schools acclimate, require leadership that is responsive. Allen and Penuel’s (2015) research on this topic concluded the following. First, the process of teachers wrestling with new standards, making sense of what they require, and translating them into best instructional practices is a complex task. Second, the successful integration of new knowledge about academic standards is dependent upon professional development and school leadership. Awareness of and dexterity with the new academic standards is a key element of understanding the school’s academic climate, that is incumbent upon the school’s administrative leadership team.

Also, a healthy academic climate requires principals to develop teacher leadership and an opportunity to practice it. Ghamrawi’s study of teacher leadership in private schools in Lebanon indicates this. In a study conducted in 60% of Beirut’s schools, the researcher utilized a survey
based on Harrison and Killion’s ten teacher roles that asked teachers to identify the most important elements to develop teacher leadership. This is important, as Ghamrawi (2013) notes, since teachers have daily contact with learners, they are in “the best positions to make critical decisions” about learning, standards, and identifying on-going professional development needs (Ghamrawi, 2013). Also, the role emerging from this study as the most dominant for teachers is that of learners (Ghamrawi, 2013). Principals are positioned to guide teachers’ learning through professional development in support the goals of the school, the learning goals of individual students, and professional growth.

Research also supports the notion that principal efficacy towards addressing the school’s academic climate can be impacted by professional development. Jacob and Goddard’s (2014) study of a principal leadership development program found that principals reported upon completion, feeling more efficacious and having a better instructional climate upon utilizing the strategies learned. However, teachers in their schools did not report a change in the academic or instructional climate. Even though principals can report that they feel like they are impacting the school’s climate, the true test lies in whether or not the faculty agrees. The gap between principals and teachers in their assessment of the academic climate might also be explanatory of another finding of this study, no impact of this professional development program on student achievement. This study is designed to provide more knowledge about school climate perception gaps, like the one highlighted by Jacob, Goddard, and others, in their study, to help close the knowledge gap between principal efficacy and effectiveness related to school climate leadership.
Social domain

The school’s social climate involves communication and collaboration among the school’s faculty and staff, and supports the academic environment. Positive social climates are characterized by staff members who regularly interact and are collegial, sharing ideas about instruction and operations. School staff members have clearly defined roles in the decision-making process regarding school initiatives (Marzano, 2012). Also, productive social climates feature on-site decision-making and teacher input and buy-in. Common issues regarding curriculum, assessment, instruction, and the achievement of all students, are the focus of collaborative teacher teams. Teacher empowerment is a component of the school’s social climate, synonymous with participatory decision-making. In practice, teacher empowerment is the authorization on instructional and other school matters by those working most closely with the students, the teachers. Previous research supports this. Sarafidou and Chatziioannidis (2012) assessed 143 teachers’ actual and perceived participation in different levels of decision-making within the school. Findings indicated high participation in student and teacher issues and less participation in managerial issues resulted in higher levels of teacher satisfaction. Participation in teacher and student issues was associated with teachers’ perceptions of better leadership and higher collegiality in schools (Sarafidou & Chatziioannidis, 2013).

Perceptions of the social climate also affect teacher efficacy towards effective teaching and learning. Horsford and O’Sullivan’ (2016) investigated the relationships between teacher perceptions of school climate and efficacy towards inclusion practices. Findings revealed that teachers’ perceptions of a supportive social climate related positively to their efficacy with
inclusion teaching practices, such as managing commonly experienced challenging behaviors in inclusive classrooms, and demonstrating competence on academic standards.

As with the school climate in general, school administrators play an important role in shaping the social climate. Shref (2006) reported that teacher perceptions of the school’s social climate was a critical factor defining school climate overall. Studies have indicated that when teachers feel supported by their principal and their colleagues, they are more committed to the profession and thus more likely to meet the educational needs of their students. Lloyd and Sullivan (2012) describe good working relationships as being paramount to teacher success. These relationships are forged when school leaders are “supportive and interactive” and when “teacher voices are heard, not marginalized in decisions regarding teaching and learning (Lloyd & Sullivan, 2012, p. 141). Their qualitative inquiry into the experience of novice teachers revealed that the demand of administrative tasks, under the principals control, take away from time with and preparing for students, leading ultimately to disillusionment and dissatisfaction.

Teachers who feel they are authorized to make decisions in the best interest of their students, without micromanagement, contribute to their sense of empowerment, and also a positive view of the school’s social climate. Furthermore, researchers have found that school climate enhances or minimizes teacher/staff emotional exhaustion, depersonalization, and feelings of low personal accomplishment, as well as attrition (Thapa & Cohen, 2013).

Terry (2008) states it is essential that a principal create an environment conducive to teacher empowerment. Rhodes and Camic (2009), reported that teacher perceptions of principal support have been linked to teacher commitment, collegiality, and retention, and conversely with job-stress and burnout. Their study of 180 teachers and 2631 students together, suggest that a
principal-led strategy of encouraging and supporting teacher-led interventions, can successfully revitalize school settings, “leading to improvements not only in school’s climate, but also in the quality of interactions within the settings” (Rhodes & Camic, 2009, p. 713).

Other factors influencing the perception of teacher empowerment would include teacher participation in school-wide decision-making and opportunities to collaborate with peers. A study of the implementation of a collaborative, school-based intervention found that increased collaboration, characterized by participatory decision-making, improved perceptions of school climate, and improved achievement (Cohen & McCabe, 2009). This suggests that the inverse could also be true, where teachers are not empowered to collaborate and participate in decision-making, perceptions of school’s social climate could suffer and ultimately correlate negatively to student achievement (Rhodes & Camic, 2009). Also, communication is a factor in the principal’s responsiveness about school climate. A healthy and productive social environment is characterized by an open flow of communication within the principal teacher dyad. (Rafferty, 2003).

Trust in relationships is another aspect of a productive school social climate. Positive social relationships among members of the school community correlate to increased likelihood of making changes in the school to improve student achievement (Bryk & Schneider, 2002). A common manifestation of fear or distrust is a reluctance of organizational members to speak out about problems, needed changes/improvements, or other work-related issues (Ryan & Ostreich, 1991). Trust in relationships, particularly in the teacher-principal dyad, positively affects teachers’ willingness to speak out about important work-related issues, and thus impacts the capacity of the school to make adjustments to improve teaching and learning.
A review of the current literature reveals more about the impact of the social environment on achievement, as well as the impact of school leadership (principals and assistant principals) on shaping it. Szczesiul and Huizenga’s (2014) study on principal leadership practice and its effect on meaningful collegial interactions during teacher collaboration, found that principal’s use of leadership practices influenced the teacher’s sense of efficacy and motivation. Principals being perceived as having an open door policy, encouraging of teacher collaboration, and demonstrating responsiveness to teacher concerns are leadership practices that foster teacher motivation as well as a positive social climate. In addition to these, being viewed as modeling the way, providing support, and encouragement are cited examples of direct action that contribute to teachers’ sense of motivation and efficacy.

Administrative leadership actions also impact the social climate through the establishment of procedures and protocols necessary for teacher collaboration. Similar to the academic climate, examples of these include common planning schedules, facilitation of teacher-to-teacher walk-throughs, connections between new teachers and mentors, and staff development that capitalizes on the teachers’ relative strengths. A mismatch in the perceptions of the adequacy of these resources between teachers and school leaders could prevent the school from maximizing its potential in these areas.

Szczesiul and Huizenga’s findings are supported by Moller’s (2013) research on the social climate, termed “collective pedagogical teacher culture.” Moller concluded that in elementary schools where teachers perceive the presence of professional communities and teacher collaboration, greater mathematics achievement is realized. In addition, this researcher found that achievement gaps between groups of students by race, economic background, etc. are
closed where the teacher’s social climate is characterized by collaboration and professional growth. Also, as it relates to new teacher recruitment and retention, the social climate facilitated by school leadership plays a critical role, according to Szcesiul and Huizenga. Correlation analysis by Whipp and Geronime (2015) support this finding. Examining the factors that predicted first job location and the retention of teachers, researchers found that among the factors influencing teacher commitment in high-poverty, urban schools, was previous student teaching in such a school (Whipp & Geronime, 2015). Experience with challenging school climates fosters resiliency. The placement of teachers in high-poverty schools without the benefit of experience with their unique social challenges, leads to teacher dissatisfaction and ultimately turnover. Principals without a clear sense of the social environment within their schools are more likely to select candidates who are not the right fit, thus feeding the cycle of lack of retention, rehiring, and on-boarding new candidates. As such, a less than clear perception of the social climate that teachers encounter, or an inability to make the right decisions in light of it, impacts the school’s stability, and ultimate capacity for teaching and learning.

Affective domain

The affective climate supports emotional well-being, belonging, and self-esteem. As previous studies demonstrate, the affective environment supports teaching and learning. Brackett, et. als (2011) study of 90 fifth and sixth grade classrooms (n=2000 students) examined the link between the affective domain of the classroom and student conduct, with student perceptions of their relationships with teachers as a mediating variable. This study affirmed the researchers’ hypothesis, that emotionally supportive classroom environments had a positive impact on student conduct, suggesting that in these positive affective environments, students
liked and respected their teachers more and ultimately displayed improved behavior. (Brackett, Reyes, & Rivers, 2011). The affective environment also has implications for teacher conduct. Shapira-Lishchinsky and Rosenblatt’s (2010) study of over 1,000 teachers in 35 high schools in Israel indicated, through regression analysis, that the school’s affective environment is related to the frequency of teachers’ voluntary absence. Their study also highlighted the role school principals play in facilitating a positive affective environment, stating as a practical implication that principals can reduce voluntary absence by creating an environment focused on caring, clarity and just procedures (Shapira-Lishchinsky & Rosenblatt, 2010).

These studies support the finding that the academic objectives of schools cannot be met unless teachers provide students with a socially and emotionally healthy affective climate (Brackett, Reyes, & Rivers, 2011). Both researchers and educators have cited the school’s emotional health as essential to learning and to student outcomes within the school. As such, professional development for teachers and administrators should include the social and emotional aspects of the learning environment (Brackett, Reyes, & Rivers, 2011).

Supportive affective climates are also characterized by teachers and students who feel respected and whose morale is high (Thapa & Cohen, 2012). According to Sass et. al., (2011) teachers with lower levels of stress are more likely to be effective in the classroom. Also, regarding students, bullying, nor abuse of any kind, is tolerated. Ferráns and Selman’s (2016) qualitative inquiry into bullying identified school level climate factors that impacted students’ decisions to by stand, upstand, or participate in bullying. School climate affects bullying as much as bullying is an indicator of school climate.
Teachers and staff who feel emotional support are more likely to contribute to the success of the school. Sanzo, Myran, and Caggiano (2015) described the cultivation of the affective climate as a leadership imperative, “creating a climate of psychological safety and innovation” (p. 50). Effective administrators create the sense among teachers that risk (and innovation) are welcomed, not discouraged. School improvement efforts, such as data-based decision making, are fostered by school climates that provide the psychological safety necessary to take risks and collaboratively confront data (Sanzo, et. al, 2015). As Collins (2001) suggested, facing the brutal facts about organizational effectiveness can be either a positive or negative, depending upon the climate cultivated by leadership.

Principal – teacher affective relationships have implications for the entire school. Shref (2012) stated the extent to which teacher-principal interactions are generally supportive and trusting or adversarial and suspicious, is reflected in most other relationships in the school. Latham and Pinder (2005) reported that school staff members with higher levels of positive affect exhibit higher levels of persistence, effort, self-reported motivation, and performance on different tasks.

A review of the recent research literature provides some relevant examples of the how the affective climate impacts teaching and learning. Emotions and feelings are important aspects of both teachers and students as members of the school community. Chang and Leach’s (2013) regression analysis of over 1,500 principals across the country concluded that principals are more likely to be affectively committed to their school districts and to experience satisfaction in their jobs when they perceive their superintendents as encouraging, understanding, and autonomy supportive. This is particularly important in light of increasing accountability measures for
educators that increase the stress and demands of the job, and can lead to decreased autonomy. Within the theoretical context of self-determination theory, Change and Leach (2013) describe this conflict as between the need to achieve autonomy in work and top-down educational mandates and policies. The superintendent and principal relationship is analogous to the principal/assistant principal and teacher relationship. The stress generated by increased accountability policies also affects teachers in the classroom. In fact, according to Sass, Seal, and Martin (2011), teachers who perceived greater administrative support were more inclined to believe they could meet the challenge of teaching even the most challenging students. To be effective, school administrative leadership must recognize the emotional stresses teachers are under, whether academic or behavioral, and lead accordingly.

Further, at the school level, interactions and relationships between students and teachers that form within the classroom undergird the teaching and learning process. Griffith (2006) indicated that relationships in the classroom directly affect the learning environment. According to Griffith, “learning is essential for students to master skills but if the affective domain is ignored, the cognitive areas are greatly affected” (Griffith, 2006, p.2). When a member of the classroom community feels threatened, sad, stressed, bullied, etc., the learning process is negatively impacted. Following is an example from the literature. Lloyd and Sullivan (2012) qualitatively recounted the story of a novice teacher displaying depersonalization and exhaustion who stated “I spend all my free time chasing kids around who don’t care, who never change, and who give me attitude. And then I’m so exhausted at the end of the day” (Lloyd & Sullivan, 2012, p. 159).
Respect for individual members of the school community is also an important characteristic of a healthy classroom environment that supports learning. Administrative leadership, in order to foster a productive, inclusive affective climate, must lead the way in this regard. An inaccurate assessment precludes school leadership from taking (or ceasing) action that affects it. Because the dimensions of school climate overlap and impact the others, effective leadership cannot overlook the affective climate because attention is diverted towards the directly academic aspects of school operations.

Where teachers and students work in positive affective environments, students have better outcomes. For example, the school’s approach to student discipline, whether it is positive or punitive, or viewed as effective or not, illustrates this. Kupchik’s (2015) longitudinal study of suspension data indicated that punitive disciplinary practices that focus on exclusion, such as suspension from school, inhibit the development of civic skills, and other positive outcomes later in life. Cornell’s (2011) multivariate analyses of over 5000 ninth grade students in 200 schools found that the perception of authoritative schools, those having both high structure and high affective support, lead to better disciplinary and academic outcomes for students. Schools that were not perceived as demonstrating this support experienced higher suspension rates, and larger disparities between white and black students, indicating another impact perception has on teaching and learning.

Similar to the school’s social environment, the school’s affective climate also has a particular impact on teachers early in the profession. Beaton’s (2014) study of perceived professional risk found that novice teachers have “contextually-based and emotionally charged stories of perceived and actual professional risk in the early years of teaching” (Beaton, 2014, p.
School leaders who are blind to this reality are also incapable of providing the leadership necessary to assuage the “pressure cooker environments of today’s schools as a young teacher” (Beaton, 2014, p. 1035). To maximize student learning, school leaders must be adept enough to proactively promote a positive affective climate, as well as be able to recognize where it stands, and where it needs to improve.

**Physical domain**

The physical environment of the school contributes to the overall climate to the extent it is safe, welcoming, and conducive to student learning. This domain includes the school building; sufficient space and its cleanliness, as well as the availability of sufficient resources like books, desks, audio-visual equipment and technology. The noise level and the building’s lighting affect the perception of the physical climate. The physical climate is also characterized by order and organization within the classrooms and ample space for hallway passing, as well as for specialized activities such as band performances and athletic practices. Marzano (2012) cites a safe and orderly environment, perceived that way by faculty and staff, as a leading indicator of school effectiveness. According to Buckley, Schneider, and Shang (2004), the quality of teacher life and educational outcomes are affected by the quality of the school building.

Uline and Tschannen-Moran (2008) report that the “nature and quality of the built environment has been shown to affect teacher attitudes, behavior, and performance” (p.59). These findings are based on their study of 80 Virginia middle schools, using correlational analysis to explore the relationships between school climate, quality of facilities, and student achievement. The quality of school facilities was related to the school climate survey measure (r=.52; p< .01), and the school climate survey was also related to student achievement (r=.61; p<
Also, Sherblom’s (2006) study states the physical environment is “strongly correlated” with achievement, including the availability of resources. Regarding class size, Gershenson’s 2015 study of fourth and fifth grade students found that a 10 percent student increase in grade size resulted in approximately .015 standard deviation decrease in reading and math achievement among socioeconomically disadvantaged students and also students with learning disabilities. Stankovic’s (2006) study also concluded that the “quality of the organization and materialization of the designed physical environment of the pre-school premises correlates with the positive developmental results of the children” (p. 51). Factors such as sound, climate control, illumination, and warm colors, positively affect the cognitive process of pre-school age children.

Tanner (2009) examined three components of the physical climate, movement, and circulation, lighting, and views, using regression analysis to describe the impact of each on student achievement, specifically performance on the Iowa Test of Basic Skills. Significant effects of these were found in the areas of reading comprehension, language arts, mathematics, and science achievement. Tanner also notes that these findings are especially important to school leaders, who are tasked with planning and managing the school’s physical climate, to maximize learning. Lemasters (1997) concurred, stating that school leaders should consider the condition of the school building and the relationship to teacher satisfaction and effectiveness. Gislason’s (2009) qualitative study of a school featuring an open architecture design found it positively contributed to school climate and also that school community members felt more socially accepted as a result of the school’s physical design.
Buckley, Schneider, and Shang (2004), highlighted another area school leaders should demonstrate awareness of, due to its impact on teacher performance – thermal comfort. Their study indicated that teachers cited the ability to control classroom temperature as central to teacher and student performance and teacher retention. Using a quantitative approach, Buckley, Schneider and Shang (2004) used regression analysis to compare teachers’ dichotomous responses to the question - do you plan to remain another year in your current school with their ratings of the physical school environment (A-F). Findings were significant. Improved perceptions of school facilities resulted in increased probability that a teacher would remain at their current school, controlling for other factors, and quantified as two-thirds the effect of another important variable affecting retention - teacher pay (Buckley, Schneider, & Shang, 2004).

Climate and Achievement

The dimensions of school climate (academic, social, affective, and physical) interact to comprise the overall school climate. Correlational studies affirm that school climate is directly related to student achievement (School Climate, 2010). Sherlund’s (2006) research frames the relationship between school climate and student achievement as one between an independent and dependent variable, respectively. Lindahl (2014) concluded that teachers’ perception of the school’s climate is a significant predictor of student performance on standardized exams, second only to the percentage of students who qualified for free and reduced price lunch, with implications for school principals. Also, regression analyses indicated that as climate assessments improved, so did mathematics scores on the NAEP (Greenberg 2004). Ding (2011) also affirms this relationship, finding that school climate is “consistently and strongly”
associated with academic achievement (Ding, 2011, p. 242). This is also supported by Cornell’s 2010 study, finding “the quality of school climate has important implications for student achievement” (Cornell, 2010, p.339). According to Sherblom (2006) “a growing body of evidence suggests that a positive school climate may enhance student academic performance in significant ways” (Sherblom, 2006, p. 29).

Teacher retention is a factor that mediates the climate – achievement relationship. The continual process of acclimating new teachers to schools delays the process of gaining familiarity with the school community, making teaching and learning less efficient. Functional teams and organizations require stability and continuity, and schools are no different. Aldridge and Fraser (2016) examined the relationship between teacher self-efficacy, job satisfaction (as antecedent to teacher retention) and school climate, framing school climate as the independent variable. The researchers found significant relationships between teacher self-efficacy, teacher job satisfaction and teacher retention, correlating findings about climate perceptions and retention, (based on a study of 781 Australian teachers in 29 schools). According to Aldridge and Fraser (2016), their findings should encourage principals to promote retention by considering school climate and specific opportunities to enhance it.

Student attendance is another factor that illustrates the relationship between school climate and academic achievement in the school. Henderson and Kearney’s (2016) study of whether student perceptions of school climate are directly and inversely related to attendance and other factor related to poor attendance were significant. Their study of 398 secondary students’ responses to surveys, using structural equation models indicated an inverse relationship between school climate variables and absenteeism (as well as anxiety, depression, and oppositional
behaviors). If students are not in school, the academic objectives of the school cannot be met. If school administrators are not in position to understand the school climate, or in sufficient communication with teachers to see what they see in classrooms on a daily basis, the requisite adjustments cannot be made.

Jain and Cohen’s (2015) study of school climate in California schools found that school climate disparities may have implications for academic disparities: schools with a more positive school climate had less pronounced achievement gaps. Additionally they found that some dimensions of school climate may be more relevant for certain subgroups. Their study suggests that any school initiative focused on addressing the achievement gaps between racial or socioeconomic subgroups, should not ignore the school level factors contributing to discrepancies in school climate. These findings are supported by research pointing to school climate overcoming some of the socioeconomic indicators of difficulty in school, such as poverty (Davis and Warner, 2016). Davis and Warner’s regression analysis of recent data sets from the New York City Department of Education, including demographic, survey, and achievement data, found that school climate domains of safety and respect, communication, engagement, and academic expectations all proved to be important factors that were associated with student achievement, especially with students in poverty.

School climate is an essential element of student achievement and success. The principal and assistant principal set the tone for their building, and thus its climate. Urick and Bowers (2011) concluded that the principal “creates academic climate through vision, mission, goals, purposes, and leadership tasks” (Urick & Bowers, 2011, p. 326). The principal must be able to understand his or her organization and the inter-relationships among its parts, and the impact that
change has on any other of its parts (Shref, 2012). Further, Urick and Bowers (2011) assert that the climate “sets the tone for the school’s approach to resolving problems” (Urick, 2011, p. 324).

Devos and Bouckenooghe (2009) describe this requirement of school leadership to set the tone as “transformational leadership”, describing it as moving beyond direction and supervision to “building the organization’s capacity to select its purposes and to support the development of changes to practices of teaching and learning (Devos & Bouckenooghe, 2009, p. 174)”.

Sherblom’s work (2006) found leadership support to be strongly associated to how school climate is perceived. McFarlane (2010), found that leadership is the key variable influencing and determining organizational performance. Also, that leadership is central to school improvement processes, concluding “almost everything depends on leadership” (McFarlane 2010, p. 3). When it comes to school climate, given its influence on student learning, the principal must be accurately attuned to his or her school’s climate to shape and respond to it effectively.

Rhodes’ (2009) research also supports these findings. He reported that as teachers’ perceptions of the leadership and collective mission improves, they become more effective in the classroom. Johnson and Stevens (2006) study of 59 elementary schools found a positive relationship between mean teacher perceptions of school climate and mean student achievement data. Also, teacher perception of the school climate was also found to be a significant variable in predicting student performance on the Scholastic Aptitude Test (SAT) (Lindahl, 2014).

Also, some important theoretical implications emerged from Shindler’s (2012) study of school climate in 21 urban public schools. First, higher quality climates lead to higher student achievement, with high student achievement being virtually impossible within the context of a
low-functioning climate (Shindler, 2012). Also, in the absence of a “deliberate attempt” to improve school climate, school climate is likely to get worse over time (Shindler, 2012, p. 8).

These studies affirm the climate – achievement relationship, and point to other possible areas of study, to include a more close examination of the school climate’s internal workings. While all of these studies identified school climate a key variable for student achievement, none of them specifically focused on school leadership as an influencer of school climate. The “deliberate attempt” to impact school climate cited by previous researchers is relevant to this study, precisely because it is an important responsibility that rests with the school’s principal and leadership team, by extension. School climate does not just happen in a vacuum outside of school leadership. It is in fact a product of school leadership, or possibly a lack thereof.

**Gap in the Literature**

Anderson’s (1982) seminal work on school climate posed the question “Is the beast worth finding (Anderson, 1982, p. 370).” Since that time, the majority of school climate research has supported the hypothesis that school climate is strongly correlated to student achievement (Thapa & Cohen, 2012). The beast has been found. This research adds to the body of knowledge about school climate moving from “finding the beast” toward advancing knowledge aimed toward “taming the beast.” Previous research has supported the notion that teacher perception of school climate is a significant predictor of student achievement, and that it is also mediated by principal leadership. Aypay and Boyaci (2012) concur, stating that while leadership and school climate are closely related, few studies have examined the relationship between the two. This study moves beyond understanding the principal leadership as a mediator influencing school climate to understanding more about how this happens or takes place. Research examining the principal’s
ability to accurately attune to teacher perceptions of climate within his or her building is understudied. Further under-researched is the relationship between the principal’s ability to accurately reflect teacher perceptions of climate. This is important, since as some scholars have described, school climate as an outcome of the principal’s work (Clifford & Menon, 2012). According to Urick (2011), the principal’s perception of school climate provided a unique measure of school climate, which has received little attention in the literature. Do principals and teachers differ in their perceptions of school climate? If so, do they differ on different aspects of climate?

**Summary**

School climate is a phenomenon that reflects the perceptions of members of a school community. School climate is an environmental factor influencing teacher motivation, effectiveness, and student learning. Previous studies have linked positive views of school climate to student achievement (MacNeil, 2009; Urick, 2011; Thapa & Cohen, 2012). According to Black (2010), the school principal has the responsibility “to create a positive organizational climate through effective leadership at the school level” (p.443). Because the principal is charged with orienting the school’s resources around improving student achievement, he or she along with the administrative team must understand school climate and be accurately attuned to it, to influence it. This study is designed to add to the body of knowledge about how school climate works, by studying if teachers and principals differ in their perception of school climate overall, and also the academic, social, affective, and physical domains of school climate. This is an important task, poised to provide high practical benefit to field of educational leadership to the extent it helps schools and researchers understand how perceptions of school
climate ultimately affect learning (Harazd, 2012). A discrepancy between principals and teachers could be indicative of problems within the school’s climate. Further, it explores the hypothesis that differing assessments of school climate might be a factor affecting the school’s capacity to positively impact teaching, learning, and achievement.
CHAPTER THREE: METHODS

Design

This quantitative causal-comparative study compares administrators’ and teachers’ school climate perceptions using the revised School-Level Environment Questionnaire (r-SLEQ). Administrator and teacher scores are compared on school climate overall and also along school climate domains: academic, social, affective, and physical. This study employs a non-experimental causal comparative design using data collected to measure and analyze how administrators and teachers (independent variables) differ on their perceptions of school climate (dependent variable). Administrators and teachers are defined by the state department of public education as licensed professionals authorized to supervise (administrators) or provide instruction (teachers) in a public school setting (State Department of Education, 2013). School climate refers to the physical and psychological preconditions necessary for learning to take place (academic, social, affective, and physical) (Tableman & Herron, 2004). The non-experimental causal comparative design is appropriate for this study due to non-manipulation of the school climate variable (Gall, Gall, & Borg, 2007). Individuals in this study were assigned to groups before the start of the research, in which case, the opportunity for randomization is eliminated (Gay & Mills, 2012). By design, inferences drawn about causality among the variables tested are reported tentatively and not conclusively (Gall, Gall, & Borg, 2007).

Research Question

This study is designed to answer the following research question (RQ):
RQ1. Is there a statistically significant difference between teacher and administrator perceptions of school climate (e.g. academic environment, social environment, physical environment, and affective environment), as measured by the revised School-Level Environment Questionnaire (r-SLEQ)?

Null Hypotheses

This study is designed to test the following five null research hypotheses:

\( H_{01} \): There is no statistically significant difference between teacher and administrator perceptions of overall school climate as measured by the revised School-Level Environment Questionnaire (r-SLEQ).

\( H_{02} \): There is no statistically significant difference between teacher and administrator perceptions of the academic environment as measured by the revised School-Level Environment Questionnaire (r-SLEQ), as evidenced by questions 4, 5, 9, 10, 14, 15, and 19.

\( H_{03} \): There is no statistically significant difference between teacher and administrator perceptions of the social environment as measured by the revised School-Level Environment Questionnaire (r-SLEQ), as evidenced by questions 1, 6, 11, 16, 20, and 21.

\( H_{04} \): There is no statistically significant difference between teacher and administrator perceptions of the affective environment as measured by the revised School-Level Environment Questionnaire (r-SLEQ), as evidenced by questions 2, 7, 12, and 17.

\( H_{05} \): There is no statistically significant difference between teacher and administrator perceptions of the physical environment as measured by the revised School-Level Environment Questionnaire (r-SLEQ), as evidenced by questions 3, 8, 13, and 18.
Participants and Setting

The sampling procedure in this study is defined by convenience, due to the proximity to the researcher to the selected setting (Gall, Gall, & Borg, 2007). Written authorization was obtained from the superintendent of a school district in Virginia, to conduct this study at 23 elementary schools within the district. According to the district’s website (“Newport News Public Schools: At a Glance,” 2016), the school district in this study is urban, with approximately 29,000 students overall, approximately 2000 teachers (approximately 800 in elementary grades), and 46 elementary school administrators (23 principals and 23 assistant principals). According to the district’s website (2016), the demographic make-up of students within the district is approximately 54% black, approximately 27% white, approximately 10% Hispanic, and approximately 9% Asian, Native American, and other designations. According to the district’s website (2016), approximately 60% of the students are classified as economically disadvantaged, as defined by qualification for free or reduced priced lunch. According to the research authorization provided by the district, each of the 23 schools participating in this study provides education to students in kindergarten through grade 5.

This study is concerned with the perceptions of both administrators and teachers, and the elementary schools in the selected district have two administrators and 25-40 teachers in each building. With the permission of each school principal, teachers assigned to each school participated on a voluntary basis. Principals were contacted via email to gauge interest and to confirm participation (appendix E). The administrative team at each elementary school (principal and assistant principal), as well as the teaching faculty, was administered the r-SLEQ using an electronic link to the survey via electronic mail (see appendix D for researcher letter).
## Demographics

Table 1

*Descriptive Demographic Statistics for Participants on r-SLEQ*

<table>
<thead>
<tr>
<th>Variable</th>
<th>Teachers</th>
<th>Administrators</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Category</td>
<td>n</td>
</tr>
<tr>
<td>Age</td>
<td></td>
<td></td>
</tr>
<tr>
<td>20-29</td>
<td>2</td>
<td>9.5</td>
</tr>
<tr>
<td>30-39</td>
<td>4</td>
<td>19</td>
</tr>
<tr>
<td>40-49</td>
<td>6</td>
<td>28.5</td>
</tr>
<tr>
<td>50-59</td>
<td>8</td>
<td>38</td>
</tr>
<tr>
<td>60-69</td>
<td>1</td>
<td>4.75</td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>21</td>
<td>100</td>
</tr>
<tr>
<td>Male</td>
<td>_</td>
<td>_</td>
</tr>
<tr>
<td>Ethnicity</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Asian</td>
<td>_</td>
<td>_</td>
</tr>
<tr>
<td>Black</td>
<td>2</td>
<td>9.5</td>
</tr>
<tr>
<td>Hispanic</td>
<td>2</td>
<td>9.5</td>
</tr>
<tr>
<td>White</td>
<td>16</td>
<td>76</td>
</tr>
<tr>
<td>Other</td>
<td>1</td>
<td>4.75</td>
</tr>
<tr>
<td>Years of Experience</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0-5</td>
<td>2</td>
<td>9.5</td>
</tr>
<tr>
<td>6-10</td>
<td>4</td>
<td>19</td>
</tr>
<tr>
<td>11-15</td>
<td>3</td>
<td>14</td>
</tr>
<tr>
<td>16-20</td>
<td>3</td>
<td>14</td>
</tr>
<tr>
<td>21-25</td>
<td>1</td>
<td>4.75</td>
</tr>
<tr>
<td>26+</td>
<td>8</td>
<td>38</td>
</tr>
</tbody>
</table>
Respondent participation in this study was completely voluntary. Participants were asked to self-identify their role, either an administrator or a teacher, and also for their demographic information.

Table 1 (above) summarizes descriptive information about the populations of teachers and administrators analyzed. The group of administrators (Group 1) consisted of 21 respondents (46 in population surveyed), comprising 7 males and 14 females. Thirteen were white, 8 black. Fourteen percent of the administrators were 30 to 39 years of age, 62% were 40 to 49 years of age, and 24% were 50 to 59. Thirty-three percent of administrators had between 11 and 15 years of experience in education, 38% between 16 and 20 years, 5% had 21 – 25 years of experience, and 24% had 26 or more years of experience in education.

The random sample of 21 teacher respondents (Group 2) was all female. Two respondents were black, 2 were Hispanic, 16 were white, and one indicated other. Approximately 10 percent of the teachers were 20 to 29 years of age, approximately 10% were 30 to 39 years of age, 29% were 40 to 49 years of age, 38% were 50 to 59 years of age, and approximately 5% were 60 to 69 years of age. Approximately 10 percent of teachers had between 0 and 5 years of experience in education, 19% between 6 and 10 years, 14% had between 11 to 15 years of experience, 14% had 16 to 20 years of experience, approximately 5% had 21 to 25 years of experience, and 38% had 26 or more years of experience in education.

Instrumentation

The revised School-Level Environment Questionnaire (r-SLEQ) was the survey used for this study. This instrument was designed to measure perceptions of school climate in the tested
domains (academic, social, affective, and physical). The instrument has been used in numerous recent studies (Basak, 2011; Caruso, 2014; Yao; 2015). Basak (2011) used this survey to correlate perceptions of school climate with job satisfaction. Carusco (2014) used the survey to investigate teacher burnout within the context of school reform in Italian schools. Yao (2015) used the instrument to correlate perceptions of school climate with emotional exhaustion.

The original version of the SLEQ survey was developed in 1990 by Australian researchers, after a review of existing instruments revealed limitations (Fisher & Fraser, 1990). The result was a 56-item instrument that focused on school-level, rather than classroom-level, factors of school climate relevant to classroom teachers. Johnson and Stevens (2007) developed the revised version, after using the original and exploring the feasibility of a shortened, more focused version. The revised SLEQ contains 21 items, and takes approximately 10 minutes to complete.

The revised SLEQ used for this study has been the subject of a validity study by its authors, Johnson and Stevens, (2007) in a large urban school district. Confirmatory analysis of the instrument indicates that it can be relied on to measure the phenomenon of school climate from different perspectives. Cronbach’s alpha is computed for reliability on school climate overall at $\alpha = .90$, and between $\alpha = .77$ and .86 for each climate factor (Johnson and Stevens, 2007). Johnson and Stevens also state the revised SLEQ can be used to investigate the link between climate and achievement, how teacher perceptions of school climate are assessed and evolve over time, and conclude that the instrument is a promising tool for examining teacher’s perceptions of school climate (Johnson and Stevens, 2007).
Five environmental school climate factors were identified through Johnson and Steven’s 2007 validity study of the instrument (collaboration, student relations, school resources, decision-making, and instructional innovation), each corresponding to a subset of questions. Although these terms are do not provide a one-to-one match with the domains and categories derived from a review of the literature and delineated for this study (academic, social, affective, and physical), they describe the same phenomenon.

The r-SLEQ consists of 21 questions and uses a five-point Likert scale ranging from Strongly Disagree to Strongly Agree (see appendix A). Responses were coded for statistical analysis as follows: Strongly Disagree = 1, Disagree = 2, Neither Agree nor Disagree = 3, Agree = 4, and Strongly Agree = 5. Mean respondent’s scores were tabulated for each question, for school climate overall, and for each climate domain (academic, social, affective, and physical). Permission was granted by Dr. Bruce Johnson (r-SLEQ author) of the University of Arizona to use the r-SLEQ on February 3, 2015 (see appendix B).

Procedures

IRB approval was sought and granted, and the researcher has taken great care to minimize all risks to the participants. The district’s research authorization committee provided approval and contact information for the 23 schools in this study in February, 2016.

For convenience of distribution and data collection, the survey questions were presented electronically using the online survey medium, Survey Monkey, with questions in the original order and with the original wording. An email (see appendix D) containing a link to the survey link was sent to exactly 775 kindergarten through 5th grade teachers, according to email lists provided to the researcher by the school division. After clicking the link in the email, all
respondents landed at the survey host (Survey Monkey), and were presented a brief description of the study and consent form (appendix C). As explained by consent form, by clicking the Next button, respondents granted consent to participate in this study and were provided instructions for completing the survey. Respondents were provided 6 questions which collected demographic data about their group identification (administrator or teacher), gender, race, age, years of experience, and experience in other schools, followed by the 21 question r-SLEQ which asked respondents assess their current school climate, using a Likert scale. After clicking the Survey Complete button ending the survey, respondents were redirected to a landing page with a message thanking them for their time and contribution to this study. The response rate for this survey was 13%, and sufficient for this analysis since the since respondents are representative of the population of teachers (Dey, 1997).

Data sets were organized using Microsoft’s Excel spreadsheet program, and manipulated to run descriptive and inferential statistics using Microsoft Excel and SPSS. To apply the independent t-test to groups of equal size, a random sample of 21 teachers was taken from the response population of 102, using a random number generator to identify the teacher survey responses for analysis (Emmerich, 1969; Gall, Gall, & Borg, 2007). Reliability statistics for each of the school climate domains were computed using Cronbach’s alpha. The statistical results provided within this study were also provided to the division superintendent, through the school division’s research authorization committee.

**Analysis**

The researcher has organized the questions by domains for analysis and reporting purposes, exactly as listed with each of the research questions and null hypotheses. Comparisons
of means by domains and by group were calculated to determine if statistically significant differences exist, an independent t-test for school climate overall and also ratings within each domain. The independent t-test was selected because it is reliable with interval data such as generated by the R-SLEQ’s Likert scale and small sample sizes (Gall, Gall, & Borg, 2007). The independent t-test was applied to each individual climate domain because it measures the effect of group assignment (teacher or administrator) on one dependent variable at a time (Gall, Gall, & Borg, 2007).

The size of the sample in this study (n=42) meets the criteria for use with the independent samples t-test (Gall, Gall, & Borg, 2007; DeWinter, 2013). To protect the validity of the results of this study, a matching procedure was used to equalize the size of the administrator and teacher groups at n=21 (a random sample of 21 surveys was taken from the population of 102 teacher respondents) (Emmerich, 1969; Gall, Gall, & Borg, 2007).

The following data screening checks are employed for the independent t-test. Data sets were checked for accuracy during transfer of data from the online survey repository to the statistical analysis software programs. Also, using the statistical software’s descriptive statistics function, a boxplot (Figure 1) was produced to identify potential extreme outliers.

To guard against a Type 1 error since the various null hypothesis constructs draw from the same survey instrument, a Bonferroni correction is applied to alpha (Howell, 2011). To test the null hypotheses 1-5, an independent t-test was employed with a significance level set at alpha = .01 (Bonferroni correction .05/5). The effect size will be reported using the eta squared statistic and will be interpreted in terms of Cohen’s d to determine the strength of the effect (dependent variable) attributable to group (independent variable) (Howell, 2011).
CHAPTER FOUR: FINDINGS

Research Question

This quantitative study was designed to answer the following research question (RQ):

**RQ1.** Is there a statistically significant difference between teacher and administrator perceptions of school climate (e.g. academic environment, social environment, affective environment, and social environment), using the revised School-Level Environment Questionnaire (r-SLEQ)?

Null Hypotheses

This study was designed to test the following five null research hypotheses:

**H₀₁:** There is no statistically significant difference between teacher and administrator perceptions of overall school climate using the revised School-Level Environment Questionnaire (r-SLEQ).

**H₀₂:** There is no statistically significant difference between teacher and administrator perceptions of the academic environment using the revised School-Level Environment Questionnaire (r-SLEQ), as evidenced by questions 4, 5, 9, 10, 14, 15, and 19.

**H₀₃:** There is no statistically significant difference between teacher and administrator perceptions of the social environment using the revised School-Level Environment Questionnaire (r-SLEQ), as evidenced by questions 1, 6, 11, 16, 20, and 21.
H_{04}: There is no statistically significant difference between teacher and administrator perceptions of the affective environment using the revised School-Level Environment Questionnaire (r-SLEQ), as evidenced by questions 2, 7, 12, and 17.

H_{05}: There is no statistically significant difference between teacher and administrator perceptions of the physical environment using the revised School-Level Environment Questionnaire (r-SLEQ), as evidenced by questions 3, 8, 13, and 18.

**Descriptive Statistics**

Electronic surveys were received from 123 teachers and administrators from the school district: 102 teachers (21 selected at random for statistical analysis) and 21 administrators. Response rates were 13% for teachers and 43% for administrators, respectively. Cronbach’s alpha was computed for each of the school climate domains as constructed for this study, with values between .63 and .88.

Table 2 contains the number of items in each survey domain with Cronbach’s alpha. The mean responses of respondents are displayed in Tables 3-6 for each individual item on the r-SLEQ. Table 3 consists of the mean responses of teachers and administrators on the academic domain. Table 4 consists of the mean responses of teachers and administrators on the social domain. Tables 5 and 6 display the mean responses of teachers and administrators on the affective and physical climates, respectively.
Table 2

*Reliability of Survey Questions by School Climate Domains*

<table>
<thead>
<tr>
<th>Item</th>
<th># of Items</th>
<th>Cronbach’s alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic Climate</td>
<td>7</td>
<td>.63</td>
</tr>
<tr>
<td>Social Climate</td>
<td>6</td>
<td>.74</td>
</tr>
<tr>
<td>Affective Climate</td>
<td>4</td>
<td>.88</td>
</tr>
<tr>
<td>Physical Climate</td>
<td>4</td>
<td>.72</td>
</tr>
</tbody>
</table>

Cronbach’s alpha for the dimensions of school climate (academic, social, affective and physical) were .63, .74, .88, and .72 respectively, indicating acceptable internal consistency (Gall, Gall, & Borg, 2007).

Table 3

*Mean Responses on the r-SLEQ for Items in the Academic Domain*

<table>
<thead>
<tr>
<th>Item</th>
<th>Teachers</th>
<th>Administrators</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teachers are frequently asked to participate in decisions.</td>
<td>2.57</td>
<td>3.86</td>
</tr>
<tr>
<td>New and different ideas are always being tried out.</td>
<td>3.71</td>
<td>4.05</td>
</tr>
<tr>
<td>Decisions about the school are made by the principal.</td>
<td>3.62</td>
<td>3.81</td>
</tr>
<tr>
<td>New courses or curriculum materials are seldom implemented.</td>
<td>2.62</td>
<td>2.23</td>
</tr>
<tr>
<td>I have very little say in the running of the school.</td>
<td>3.33</td>
<td>1.86</td>
</tr>
<tr>
<td>We are willing to try new teaching approaches in my school.</td>
<td>3.62</td>
<td>3.86</td>
</tr>
<tr>
<td>Teachers in this school are innovative.</td>
<td>3.52</td>
<td>3.71</td>
</tr>
</tbody>
</table>
Table 4

*Mean Responses on the r-SLEQ for Items in the Social Domain*

<table>
<thead>
<tr>
<th>Item</th>
<th>Teachers</th>
<th>Administrators</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teachers design instructional programs together.</td>
<td>3.52</td>
<td>3.76</td>
</tr>
<tr>
<td>There is good communication among teachers.</td>
<td>3.29</td>
<td>3.81</td>
</tr>
<tr>
<td>I have regular opportunities to work with other teachers.</td>
<td>3.48</td>
<td>4.33</td>
</tr>
<tr>
<td>I seldom discuss the needs of individual students with other teachers.</td>
<td>2.10</td>
<td>2.05</td>
</tr>
<tr>
<td>Classroom instruction is rarely coordinated across teachers.</td>
<td>2.29</td>
<td>2.00</td>
</tr>
<tr>
<td>Good teamwork is not emphasized enough at my school.</td>
<td>2.57</td>
<td>1.67</td>
</tr>
</tbody>
</table>

Table 5

*Mean Responses on the r-SLEQ for Items in the Affective Domain*

<table>
<thead>
<tr>
<th>Item</th>
<th>Teachers</th>
<th>Administrators</th>
</tr>
</thead>
<tbody>
<tr>
<td>Most students are well mannered or respectful of the school staff.</td>
<td>3.33</td>
<td>4.14</td>
</tr>
<tr>
<td>Most students are helpful and cooperative with teachers.</td>
<td>3.48</td>
<td>4.19</td>
</tr>
<tr>
<td>Students in this school are well behaved.</td>
<td>2.81</td>
<td>3.95</td>
</tr>
<tr>
<td>Most students are motivated to learn.</td>
<td>2.90</td>
<td>3.90</td>
</tr>
</tbody>
</table>
Table 6

*Mean Responses on the r-SLEQ for Items in the Physical Domain*

<table>
<thead>
<tr>
<th>Item</th>
<th>Teachers</th>
<th>Administrators</th>
</tr>
</thead>
<tbody>
<tr>
<td>Instructional equipment is not consistently accessible.</td>
<td>2.57</td>
<td>2.19</td>
</tr>
<tr>
<td>The school library has sufficient resources and materials.</td>
<td>3.33</td>
<td>3.71</td>
</tr>
<tr>
<td>Video equipment, tapes, and films are readily available.</td>
<td>3.42</td>
<td>3.29</td>
</tr>
<tr>
<td>The supply of equipment and resources is not adequate.</td>
<td>2.71</td>
<td>2.43</td>
</tr>
</tbody>
</table>

**Data Screening**

**Null Hypothesis One**

Data screening was conducted on the dependent variable of each group (survey ratings, 1-5) regarding data inconsistencies and outliers on the data set for null hypothesis one. No data errors, inconsistencies, or outliers were identified. See Figure 1 for box and whisker plot.

*Figure 1. Box and Whisker Plot for r-SLEQ Survey Ratings by Group*
Also, a normality test was used to test the null hypothesis that data sets (null hypothesis one) for each group were normally distributed. For both groups, the null hypothesis was accepted indicating normality. As indicated by the Shapiro-Wilk test, no violations of normality were found. See Table 7, below, for the tests of normality (null hypothesis one) and Figure 2 and Figure 3 for histograms graphically depicting the data.

Table 7

Test of Normality

<table>
<thead>
<tr>
<th>Tests of Normality</th>
<th>Kolmogorov-Smirnov</th>
<th>Shapiro-Wilk</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Statistic</td>
<td>df</td>
</tr>
<tr>
<td>Teachers</td>
<td>.179</td>
<td>21</td>
</tr>
<tr>
<td>Administrators</td>
<td>.302</td>
<td>21</td>
</tr>
</tbody>
</table>

a. Lilliefors Significance Correction

Figure 2. Histogram of Teacher Survey Responses (Null Hypothesis One)
Null Hypothesis Two

Data screening was conducted on the dependent variable of each group (survey ratings, 1-5) regarding data inconsistencies and outliers on the data set for null hypothesis two. No data errors, inconsistencies, or outliers were identified. See Figure 4 for box and whisker plot.

Figure 3. Histogram of Administrator Survey Responses (Null Hypothesis One)
Figure 4. Box and Whisker Plot for r-SLEQ Survey Ratings by Group (Null Hypothesis Two)

Also, a normality test was used to test the null hypothesis that data sets (null hypothesis two) for each group were normally distributed. For both groups, the null hypothesis was accepted indicating normality. As indicated by the Shapiro-Wilk test, no violations of normality were found. See Table 8, below, for the tests of normality (null hypothesis one) and Figures 5 and 6 for histograms graphically depicting the data.
Table 8

Test of Normality (Academic Domain)

<table>
<thead>
<tr>
<th></th>
<th>Kolmogorov-Smirnov</th>
<th>Shapiro-Wilk</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Statistic</td>
<td>df</td>
</tr>
<tr>
<td>Teacher Academic Domain</td>
<td>.319</td>
<td>7</td>
</tr>
<tr>
<td>Administrator Academic Domain</td>
<td>.374</td>
<td>7</td>
</tr>
</tbody>
</table>

a. Lilliefors Significance Correction

Figure 5. Histogram of Teacher Survey Responses (Null Hypothesis Two)
Figure 6. Histogram of Administrator Survey Responses (Null Hypothesis Two)

Null Hypothesis Three

Data screening was conducted on the dependent variable of each group (survey ratings, 1-5) regarding data inconsistencies and outliers on the data set for null hypothesis three. No data errors, inconsistencies, or outliers were identified. See Figure 7 for box and whisker plot.
Figure 7. Box and Whisker Plot for r-SLEQ Survey Ratings by Group (Null Hypothesis Three)

Also, a normality test was used to test the null hypothesis that data sets (null hypothesis three) for each group were normally distributed. For both groups, the null hypothesis was accepted indicating normality. As indicated by the Shapiro-Wilk test, no violations of normality were found. See Table 9, below, for the tests of normality (null hypothesis three) and Figure 8 and Figure 9 for histograms graphically depicting the data.

Table 9

Test of Normality

<table>
<thead>
<tr>
<th>Tests of Normality</th>
<th>Kolmogorov-Smirnov&lt;sup&gt;a&lt;/sup&gt;</th>
<th>Shapiro-Wilk</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Statistic</td>
<td>df</td>
</tr>
<tr>
<td>Teachers Social Domain</td>
<td>.292</td>
<td>6</td>
</tr>
<tr>
<td>Administrators Social Domain</td>
<td>.279</td>
<td>6</td>
</tr>
</tbody>
</table>

* a. Lilliefors Significance Correction
Figure 8. Histogram of Teacher Survey Responses (Null Hypothesis Three)
Figure 9. Histogram of Administrator Survey Responses (Null Hypothesis Three)

Null Hypothesis Four

Data screening was conducted on the dependent variable of each group (survey ratings, 1-5) regarding data inconsistencies and outliers on the data set for null hypothesis three. No data errors, inconsistencies, or outliers were identified. See Figure 10 for box and whisker plot.
Figure 10. Box and Whisker Plot for r-SLEQ Survey Ratings by Group (Null Hypothesis Four)

Also, a normality test was used to test the null hypothesis that data sets (null hypothesis four) for each group were normally distributed. For both groups, the null hypothesis was accepted indicating normality. As indicated by the Shapiro-Wilk test, no violations of normality were found. See Table 10, below, for the tests of normality (null hypothesis four) and Figure 11 and Figure 12 for histograms graphically depicting the data.

Table 10

Test of Normality (Affective Domain)

<table>
<thead>
<tr>
<th>Tests of Normality</th>
<th>Kolmogorov-Smirnov(^a)</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Statistic</td>
<td>df</td>
<td>Sig</td>
<td>Statistic</td>
<td>df</td>
<td>Sig</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teacher Affective Domain Responses</td>
<td>.284</td>
<td>4</td>
<td>.</td>
<td>.938</td>
<td>4</td>
<td>.639</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Administrator Affective Domain Responses</td>
<td>.249</td>
<td>4</td>
<td>.</td>
<td>.887</td>
<td>4</td>
<td>.370</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Lilliefors Significance Correction
Figure 11. Histogram of Teacher Survey Responses (Null Hypothesis Four)
Figure 12. Histogram of Administrator Survey Responses (Null Hypothesis Four)

Null Hypothesis Five

Data screening was conducted on the dependent variable of each group (survey ratings, 1-5) regarding data inconsistencies and outliers on the data set for null hypothesis five. No data errors, inconsistencies, or outliers were identified. See Figure 13 for box and whisker plot.
Also, a normality test was used to test the null hypothesis that data sets (null hypothesis five) for each group were normally distributed. For both groups, the null hypothesis was accepted indicating normality. As indicated by the Shapiro-Wilk test, no violations of normality were found. See Table 11, below, for the tests of normality (null hypothesis four) and Figure 14 and Figure 15 for histograms graphically depicting the data.

Table 11

Test of Normality (Physical Domain)

<table>
<thead>
<tr>
<th>Tests of Normality</th>
<th>Kolmogorov-Smirnov&lt;sup&gt;a&lt;/sup&gt;</th>
<th>Shapiro-Wilk</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Statistic</td>
<td>df</td>
</tr>
<tr>
<td>Teacher Physical Domain</td>
<td>.212</td>
<td>4</td>
</tr>
<tr>
<td>Administrator Physical Domain</td>
<td>.247</td>
<td>4</td>
</tr>
</tbody>
</table>

<sup>a</sup> Lilliefors Significance Correction
Figure 14. Histogram of Teacher Survey Responses (Null Hypothesis Five)
Results

Null Hypothesis One

Null hypothesis one stated that there was no statistically significant difference between teacher and administrator perceptions of overall school climate using the revised School-Level Environment Questionnaire. An independent group t-test revealed that teachers (M=3.15, SD=1.77) and administrators (M=3.28, SD=1.81) do not differ as predicted, t(40) =1.72, p=.088. The first null hypothesis was accepted.

Null Hypothesis Two

Null hypothesis two stated that there was no statistically significant difference between teacher and administrator perceptions of the academic school climate using the revised School-
Level Environment Questionnaire (questions 4, 5, 9, 10, 14, 15, 19). An independent group t-test revealed that teachers ($M=2.95$, $SD=1.1$) and administrators ($M=3.34$, $SD=1.18$) displayed statistically significant differences in perceptions of this domain, $t(40)=2.91$, $p=.003$, eta squared=.0281 (Cohen’s $d=.34$). The second null hypothesis was rejected, however the effect size was moderate (Howell, 2011).

**Null Hypothesis Three**

Null hypothesis two stated that there was no statistically significant difference between teacher and administrator perceptions of the *social* school climate using the revised School-Level Environment Questionnaire (questions 1, 6, 11, 16, 20, 21). An independent group t-test revealed that teachers ($M=3.52$, $SD=1.05$) and administrators ($M=2.94$, $SD=1.25$) displayed statistically significant differences in perceptions of this domain, $t(40)=4.02$, $p<.001$, eta squared=.0588 (Cohen’s $d=.50$). The third null hypothesis was rejected, with a moderate effect size (Howell, 2011).

**Null Hypothesis Four**

Null hypothesis four stated that there was no statistically significant difference between teacher and administrator perceptions of overall *affective* school climate using the revised School-Level Environment Questionnaire (questions 2, 7, 12, 17). An independent group t-test revealed that teachers ($M=3.11$, $SD=1.11$) and administrators ($M=4.05$, $SD=.58$) displayed statistically significant differences in perceptions of this domain, $t(40)=6.89$, $p<.001$, eta squared=.2193 (Cohen’s $d\geq1$). Therefore, the fourth null hypothesis was rejected, however, the effect size was large (Howell, 2011).
Null Hypothesis Five

Null hypothesis five stated that there was no statistically significant difference between teacher and administrator perceptions of the physical school climate using the revised School-Level Environment Questionnaire (questions 3, 8, 13, 18). An independent group t-test revealed that teachers (M=2.87, SD=1.69) and administrators (M=2.90, SD=1.7) do not differ as predicted, t (166) = .22, p=.83, eta squared=.0001. The fifth null hypothesis was accepted.

Table 12

Differences between Teacher and Administrator Perceptions of School Climate

<table>
<thead>
<tr>
<th>Description</th>
<th>Teachers (n=21)</th>
<th>Administrators (n=21)</th>
<th>t</th>
<th>df</th>
<th>p</th>
<th>η²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Climate Overall</td>
<td>3.15 1.77</td>
<td>3.28 1.81</td>
<td>1.72</td>
<td>40</td>
<td>.088</td>
<td>.0036</td>
</tr>
<tr>
<td>Academic Climate</td>
<td>2.95 1.1</td>
<td>3.34 1.18</td>
<td>2.91</td>
<td>40</td>
<td>.003</td>
<td>.0281</td>
</tr>
<tr>
<td>Social Climate</td>
<td>3.52 1.05</td>
<td>2.94 1.25</td>
<td>4.02</td>
<td>40</td>
<td>&lt;.001</td>
<td>.0588</td>
</tr>
<tr>
<td>Affective Climate</td>
<td>3.11 1.11</td>
<td>4.05 .58</td>
<td>6.89</td>
<td>40</td>
<td>&lt;.001</td>
<td>.2193</td>
</tr>
<tr>
<td>Physical Climate</td>
<td>2.87 1.69</td>
<td>2.90 1.7</td>
<td>.22</td>
<td>40</td>
<td>.83</td>
<td>.0001</td>
</tr>
</tbody>
</table>

Summary

The preceding utilized a t-test to check for possible statistical differences in teacher and administrator perceptions of school climate, utilizing the revised SLEQ, with findings summarized in Table 8 (above). There was no significant difference in perceptions of school climate overall and on the physical climate. However, statistically significant differences were found on the academic, social, and affective domains of school climate.
CHAPTER FIVE: DISCUSSION, CONCLUSIONS, AND RECOMMENDATIONS

Discussion

The purpose of this causal-comparative study was to examine the possible differences between teacher and administrator perceptions of school climate. Using the r-SLEQ, this study surveyed 123 educators (102 teachers and 21 administrators), and analyzed 42 survey responses to determine if educators differed in their perceptions of school climate overall and also on the academic, social, affective, and physical domains of school climate. This research question is important because it helps educators and researchers understand the gap between previous school climate, linking climate and achievement. The gap in the research pointed to the school’s administrative leadership, and whether or not principals and assistant principals perceived the school climate differently than teachers. The literature underscores the principal’s role in shaping school climate – an accurate awareness of school climate necessarily precedes the ability to shape it (Collins, 2001; Urick, 2011; MacNeil et al, 2009; Berson, 2015).

Research Questions

Is there a statistically significant difference between teacher and administrator perceptions of school climate (e.g. academic environment, social environment, affective environment, and social environment), using the revised School-Level Environment Questionnaire (R-SLEQ)?

Statistically significant differences were found between the teachers’ and administrators’ perceptions of school climate in three areas: the academic, social, and the affective domains. There were no statistically significant differences between the teachers’ and the administrators’ perceptions in two areas: the physical climate and on school climate overall. In light of the theoretical frameworks discussed previously that connected teachers’ perceptions of school climate to teacher
motivation and effectiveness, along with previous studies that affirm the climate – student achievement connection, as well as the responsibilities of administrative leadership related to school climate, these findings are significant to understanding the school climate research – practice gap.

**Null Hypothesis One**

There is no statistically significant difference between teacher and administrator perceptions of *overall* school climate using the revised School-Level Environment Questionnaire (r-SLEQ).

The revised SLEQ indicated no significant difference between the teachers’ and administrators’ perceptions on school climate overall. Teachers assessed school climate with a mean score of 3.15 while administrators assessed school climate with a mean score of 3.28. The first null hypothesis was accepted. However, this study goes deeper than this initial finding. By organizing the survey questions into subsets that examine specific aspects of school climate, it uncovers where differences actually exist, undetected by a general application of the school climate survey.

**Null Hypothesis Two**

There is no statistically significant difference between teacher and administrator perceptions of *academic* school climate using the revised School-Level Environment Questionnaire (r-SLEQ).

The revised SLEQ revealed a statistically significant difference between teachers’ and administrators’ perceptions of the academic climate (questions 4, 5, 9, 10, 14, 15, 19). Teachers assessed the academic climate with a mean score of 2.95 while administrators assessed school climate with a mean score of 3.34. The inferential statistic resulted in null hypothesis two being rejected.
This result answers the research question affirmatively and supports the hypothesis that a factor influencing school administrators’ ability to influence school climate could be how school climate is perceived, and specifically whether or not administrator and teacher perceptions align. Herzberg’s theory posits that administrators must manage to both avoid dissatisfaction and to provide satisfaction in the work of teachers (Buckingham & Coffman, 1999). The academic climate, being at the core of the work of teaching and learning, is an area administrators must be aware of and responsive to, to accomplish this (Bernhardt, 2016). The result on this null hypothesis supports the notion that the presence of a blind spot between administrators and teachers on perceptions of the academic climate might prevent what is already known about the impact of school climate on achievement from taking root, thus explanatory of the gap between school climate research and school leadership practice (Cohen & McCabe, 2009).

**Null Hypothesis Three**

There is no statistically significant difference between teacher and administrator perceptions of social school climate using the revised School-Level Environment Questionnaire (r-SLEQ).

The revised SLEQ indicated no statistically significant difference between teachers’ and administrators’ perceptions of the social climate (questions 1, 6, 11, 16, 20, 21). Teachers assessed the social climate with a mean score of 3.52 while administrators assessed school climate with a mean score of 2.94. Inferential statistics result in null hypothesis three being rejected.

This result also answers the research question affirmatively and supports the hypothesis that a factor influencing school administrators’ ability to maximize school climate is whether or not administrator and teacher perceptions align. The social climate, also being at the core of the work of teaching and learning, is an area administrators must be aware of and responsive to in order to
support the conditions necessary for teaching and learning (Marzano, 2012). The result on this null hypothesis also supports the notion that discrepancies between administrators and teachers of the social climate might be explanatory of the gap between principal efficacy and actual effectiveness (Jacob & Goodard, 2014).

**Null Hypothesis Four**

There is no statistically significant difference between teacher and administrator perceptions of *affective* school climate using the revised School-Level Environment Questionnaire (r-SLEQ).

The revised SLEQ indicated a significant difference between the teachers’ and administrators’ perceptions on the affective climate (questions 2, 7, 12, 17). Teachers assessed the affective climate with a mean score of 3.11 while administrators assessed school climate with a mean score of 4.05. Inferential statistics result in null hypothesis four being rejected.

This result also answers the research question affirmatively, and supports the hypothesis that a factor influencing school leaders’ ability to influence school climate could be how school climate is perceived and whether or not administrator perceptions align with that of teachers. According to Parke, Grenville, & Flessa (2011), principals who lead successfully do so to the extent they are responsive to the school’s students, staff and climate. A discrepant view of the affective climate, as this finding reveals, would preclude successful leadership since the affective climate is also at the core of teaching and learning.

**Null Hypothesis Five**

There is no statistically significant difference between teacher and administrator perceptions of *physical* school climate using the revised School-Level Environment Questionnaire (r-SLEQ).
The revised SLEQ indicated no significant difference between the teachers’ and administrators’ perceptions on the physical school climate (questions 3, 8, 13, and 18). Teachers assessed school climate with a mean score of 2.87 while administrators assessed school climate with a mean score of 2.90. The fifth null hypothesis was accepted.

**Conclusions**

The following conclusions are drawn based on the results of this study and the previous literature. School climate is a complex phenomenon that influences student achievement (MacNeil, 2009; Thapa & Cohen, 2012). This study suggests that school climate can be perceived differently depending upon one’s position or perspective in the school, teacher, administrator, etc. This is an important finding. A matching assessment of the school climate is necessary for school leaders to be equipped to influence it, to maximize it, for the purpose of encouraging student learning within schools (Chenowith & Theokas, 2013).

Teachers and administrators viewed the physical domain similarly, however, this study points to areas where discrepant perceptions between teachers and administrators were statistically significant - the academic, social, and affective climates. These areas are at the core of the work of teaching and learning in the school, all impact student achievement, and all are areas that administrators should support. The questions on the r-SLEQ in the academic area focus on teaching and learning (questions 4, 5, 9, 10, 14, 15, 19), specifically about innovation, curriculum, and decision-making. The questions in the social area focus on collegiality and collaboration (questions 2, 7, 12, 17). Finally, the questions in the affective area focus on student behavior and discipline (questions 2, 7, 12, 17), specifically whether students in the school are well-mannered, cooperative, and motivated to learn.
Perception affects motivation and behavior (Latham and Pinder, 2005). Based on this, instances where climate is perceived differently by members of the school community could result in discordant behaviors, expectations, and communications, making the work of the school (teaching and learning) less efficient. Drawing a potential example, differing perceptions about student behavior is an example of a factor that could, in the absence of responsive leadership, exacerbate the “pressure cooker” of today’s teaching environment (Beaton, 2014). Conversely, if administrative perceptions more closely reflect the reality in schools, that reality must be communicated throughout the school community, and not assumed. Teachers who perceive greater administrative support have greater self-efficacy towards believing they could meet the challenge of teaching even the most challenging students (Sass, Seal, and Martin (2011). However, where there are differences in perceptions, it is difficult to imagine the support teachers need, encouraging them to persist, can exist.

Finally, if indeed everything rises and falls on school leadership an understanding of school climate that is responsive to teachers’ perceptions is a necessity for school administrators. Principals who possess an understanding of the phenomena of school climate are positioned to act with intention to affect it. However, to avoid unaligned perceptions of school climate, among those intentional acts informed principals should consider includes the use of valid and reliable instruments to assess teachers’ perceptions of school climate. The findings of this study suggest the gap in the literature between school climate research and school improvement practice, is at least partially defined by yet another gap – the gap between teachers’ and administrators’ perceptions of the school’s climate.
Implications

For all that is known about the positive influence positive school climates have on teaching, learning, and student achievement, educational practice has not responded. The lack of response points to two possible areas of concern for schools and inquiry for scholars. Either school administrators, who are charged with managing the school’s climate to promote student learning, are unaware of the climate as it is experienced by teachers, or being aware, administrators are not equipped with the tools and training necessary to impact the school’s climate. This particular study supports Keiser and Schulte’s (2011) position, that it is not enough to informally assess school climate as assumptions can negatively impact organizational effectiveness. However, the major implication and finding of this study is that the gap between school improvement research and practice is defined to a significant degree by the gap between what teachers and administrators perceive the school’s climate to be. Perception affects motivation and action, so whenever perceptions are not congruent, the work of teaching and learning in schools is negatively impacted and less efficient as a result. Since, according to Cohen and McCabe (2009), educational practice is driven by what is measured; more attention should be paid to formally measuring and reacting to school climate to help close these gaps in perceptions between teachers and administrators.

Indeed, if educational practice is to be driven by what is measured, then school climate should be at the forefront of what is measured. States and districts should take the lead by considering how school climate can be assess and communicated as a measure of school accountability (Cohen & McCabe, 2009). When states and districts take the lead in measuring school climate against adopted standards, educational leadership and development programs will
follow, if they are responsive to marketplace demand. Graduate school leadership programs should include coursework on school climate and organizational behavior, as well as the impact school climate and responsive school climate leadership has on teaching and learning. Also, school climate should be understood as a multi-faceted phenomenon, including academic, social, affective, and physical dimensions. In practice, in-service school leadership training and professional development, typically run by school districts, should include experiences for school leaders in assessing school climate using formal instruments, surveys, etc. In addition, professional development for school leaders should also include the implementation of leadership practices that positively impact school climate; the next step after formal assessments are made.

The findings of this study also have important implications that should inform how climate-focused assessment protocols should be conducted. First, surveys should be employed that reliably assess the climate within schools. This study revealed that while one construct or survey would describe one circumstance, another construct (or subset) of questions might reveal important findings. These findings, in this case about how the school climate phenomenon is perceived among stakeholders, might have been overlooked if only the original construct were used. Finally, since perceptions of school climate change over time, climate surveys should be administered at optimal times during the school year to improve validity. For example, surveys should not be conducted exclusively at the beginning of the school year when fresh optimism reigns, and neither at the end of the school year when teachers are likely to be tired.
Limitations

The design of this study limits internal threats to validity in the areas of selection bias, instrumentality and maturation. Pursuant to IRB guidelines, all participants were volunteers and were assured that their participation or non-participation would have no effect on their relationships with their employer or Liberty University. Additionally, no study participants were compensated. The teacher respondents selected for statistical analyses were selected at random. Each response was coded and assigned a record number using Microsoft Excel. Records were retrieved for analysis as identified by the assigned number, using a random number generator. The survey instrument, the r-SLEQ, was delivered electronically to all participants in exactly the same manner (there was no option for a paper/pencil survey). Lastly, the surveys were provided to all participants during the same three-week window addressing threats about maturation from the perspective that all participants responded to concurrent school climate conditions, and at relatively the same time.

However, the following also acknowledges external threats and limitations of this study with some context to inform the reader. This study is limited by some degree its scope/generalizability, and also by possible differences in assumptions affecting the selection and application of the test statistic. By design, a convenience sample was selected to include only the elementary schools in the subject district. The limiting factor is whether or not these findings would change if schools covering a broader range of grade-levels were included. However, findings are buttressed by the fact this study includes participation by 23 schools.

Finally, the Likert interval summative scale data processed for this study was appropriate for an independent sample t-test since it is considered to be parametric (Gall, Gall, & Borg,
data to be non-parametric, in which case limiting external validity in the absence of a non-parametric statistical test. Also, generalizability of these findings could be affected by the survey response rates the reader finds acceptable. For this study the teacher and administrator response rates are 13% and 43%, respectively. Finally, effect size statistics should be considered in interpreting the results of this study.

**Recommendations for Future Research**

The results of this study are reported tentatively, not conclusively, pointing to other research questions and possibly additional hypotheses to test. The first question emerging for future research is whether or not unaligned perceptions extend to other school climate domains such as the physical domain, or are the academic, social, and affective domain particular blind spots between teachers and administrators. The recommendation is to replicate the procedures in this study in another setting, to determine if other areas present statistically significant differences. The second question is whether or not these findings are affirmed using other school climate surveys or constructs of questions using the r-SLEQ. The recommendation is to use other surveys or constructs of question items on the r-SLEQ. The third question is whether these finding are supported when including participants from middle and high schools. The third recommendation is to examine school climate, from the perspective of perceptual differences between administrators and teachers, in secondary schools. The fourth and final recommendation is to explore the school climate phenomenon, particularly the gap between teacher and administrator perceptions, using a qualitative methodology. This study points to a significant “what.” A qualitative methodology would help both scholars and practitioners to understand the
“why.” These recommendations are made to continue to close the gap between school climate knowledge and school improvement practice.
REFERENCES

(2015, May 15). Retrieved from Common Core State Standards Initiative:

http://www.corestandards.org/


Center for Social and Emotional Education, (. (2011). *The School Climate Challenge: Narrowing the Gap Between School Climate Research and School*.}


APPENDIX A

Revised School-Level Environment Questionnaire (r-SLEQ)

https://www.coe.arizona.edu/sites/coe/files/revisedsleq-instrument.pdf
APPENDIX B

RE: Revised SLEQ - Permission to Use - Alston, Clyde Reginald

RE: Revised SLEQ - Permission to Use

Johnson, Bruce P - (brucej) <brucej@email.arizona.edu>

Tue 2/3/2015 6:51 PM
Inbox

To: Reggie Alston
Cc: Alston, Clyde Reginald <cralston@library.edu>; Joe Stevens <stevensj@uoregon.edu>; Johnson, Bruce P - (brucej) <brucej@email.arizona.edu>

5 attachments
Johnson&Stevens2006.pdf; JohnsonStevensZvoch2007.pdf; RevisedSLEQ-instrument.doc; RevisedSLEQ-items&factors.doc; SLEQ Factor Analysis Paper.pdf;

Yes, you can certainly use the Revised SLEQ. I am attaching some papers, in case you do not have some of them, and the instrument and factor information.

We would be interested in hearing about your results.

Bruce

Bruce Johnson
University of Arizona
Professor and Head, Teaching, Learning & Sociocultural Studies Department
Co-Director, UA STEM Learning Center
P.O. Box 210069
Tucson, AZ 85721-0069 USA
Phone: 1 520 626-8700
Fax: 1 520 621-1853
Email: brucej@email.arizona.edu
http://www.coe.arizona.edu/faculty_profile/215
http://stem.arizona.edu/
You are invited to be in a research study of teacher and administrator perceptions of school climate. You were selected as a possible participant because you either teach, or work as an administrator at one of the elementary schools approved by [Redacted] to participate. I ask that you read this form and ask any questions you may have before agreeing to be a part of this study.

This study is being conducted by Reggie Alston, Doctoral Candidate - Liberty University.

**Background Information:**
The purpose of this study is to examine school climate from the perspectives of both teachers and school administrators. It applies statistical analysis to your school climate survey responses to determine if school administrators and teachers differ in their perceptions of school climate. This study describes the nature and degree to which differences might exist, describes the impact on teaching and learning, and the implications for professional development and further research.

**Procedures:**
If you agree to be in this study, I would ask you to do the following things:

Click on the **Next** button below and complete 21 school climate survey questions, with a response of either: *strongly disagree, disagree, neither disagree or agree, agree or strongly agree* and 6 demographic questions.

Once you have completed the survey, click **Survey Complete** so that your responses are recorded.

Be advised, this anonymous survey should take no longer than 10 minutes of your time to complete the 27 items.

**Risks and Benefits of being in the Study:**
The risks of participation in this study are minimal, and no more than the participant would encounter in everyday life. Findings of this research will help practitioners and researchers improve professional development for school leaders.

**Compensation:**
There is no participant compensation associated with this study.

**Confidentiality:**
The records of this study will be kept private. In any sort of report I might publish, I will not include any information that will make it possible to identify any subject (participant or school). Research records will be stored securely under password protection and only the researcher will have access to
the records.

**Voluntary Nature of the Study:**
Participation in this study is voluntary. Your decision whether or not to participate will not affect your current or future relations with Liberty University or Newport News Public Schools. If you decide to participate, you are free to not answer any question or withdraw at any time by clicking the **Exit** button at the top right corner, without affecting those relationships.

**Contacts and Questions:**
The researcher conducting this study is Reggie Alston. You may ask any questions you have now. If you have questions later, you are encouraged to contact him at [redacted], or via email at cralston@liberty.edu, or Dr. Kenneth Gossett, Dissertation Chair, at kdgossett@liberty.edu.

If you have any questions or concerns regarding this study and would like to talk to someone other than the researcher, you are encouraged to contact the Institutional Review Board, 1971 University Blvd, Carter 134, Lynchburg, VA 24515 or email at irb@liberty.edu.

**Statement of Consent:**
I have read and understood the above information. I have asked questions and have received answers.

By clicking on the **Next** button below, I consent to participate in the study.
APPENDIX D
Recruitment Email Message

Dear [Teacher or Administrator]:

As a graduate student in the School of Education at Liberty University, I am conducting research as part of the requirements for a doctorate in education (Ed.D). The purpose of my research is to examine school climate from the perspectives of both teachers and school administrators using statistical analysis. I am writing to invite you to participate in my study with permission from your school division (please see attachment).

If you are currently an elementary school teacher, principal, or assistant principal, and are willing to participate, you will be asked to respond to a brief electronic school climate survey. It should take approximately 10 minutes for you to complete the electronic survey. Your participation will be completely anonymous, and no personal identifying information will be required.

To participate, please click on the link provided here:
https://www.surveymonkey.com/r/SchoolClimateResearchStudy

A consent document is provided as the first page you will see after you click on the survey link. Please click on the Next button at the end of the consent information to indicate that you have read the consent information and would like to take part in the survey.

Thank you very much for your time and assistance.

Sincerely,

Reggie Alston
Doctoral Candidate
Good afternoon and

I've received approval from the Research Authorization Committee to proceed with my dissertation research. I wanted to ask for your approval/input before sending out this message (below) to elementary administrators.

Thank you for your time.

Reggie

Colleagues,

Within the next two weeks you will receive an email from me on my Liberty University email account asking you to participate in a brief school climate electronic survey entitled “Research Study – School Climate.” The study is approved by the NNPS Research Authorization Committee, and is a part of my dissertation research which examines school climate from the perspectives of both teachers and administrators. I am asking every elementary principal, assistant principal and teacher in the division to participate, and appreciate your assistance and your time. However, participation is strictly voluntary for you and your teachers, who will receive the same email. All responses are anonymous and confidential. The survey will take approximately ten minutes to complete.

Please let me know if you have any questions, or if you prefer for your school to decline participation.

Thank you.

Reggie Alston
School Climate - Research Study

School-Level Environment Questionnaire - Revised

Used with permission, Dr. Bruce Johnson, University of Arizona

The following are statements about the school in which you work and your working environment. Indicate how well each statement AGREES WITH YOUR DESCRIPTION OR VIEWS of your school environment.

1. Teachers design instructional programs together.
   - Strongly Disagree
   - Disagree
   - Neither Agree nor Disagree
   - Agree
   - Strongly Agree

2. Most students are well mannered or respectful of the school staff.
   - Strongly Disagree
   - Disagree
   - Neither Agree nor Disagree
   - Agree
   - Strongly Agree

3. Instructional equipment is not consistently accessible.
   - Strongly Disagree
   - Disagree
   - Neither Agree nor Disagree
   - Agree
   - Strongly Agree
APPENDIX F

4. Teachers are frequently asked to participate in decisions.
   ○ Strongly Disagree
   ○ Disagree
   ○ Neither Agree nor Disagree
   ○ Agree
   ○ Strongly Agree

5. New and different ideas are always being tried out.
   ○ Strongly Disagree
   ○ Disagree
   ○ Neither Agree nor Disagree
   ○ Agree
   ○ Strongly Agree

6. There is good communication among teachers.
   ○ Strongly Disagree
   ○ Disagree
   ○ Neither Agree nor Disagree
   ○ Agree
   ○ Strongly Agree

7. Most students are helpful and cooperative with teachers.
   ○ Strongly Disagree
   ○ Disagree
   ○ Neither Agree nor Disagree
   ○ Agree
   ○ Strongly Agree
APPENDIX F

8. The school library has sufficient resources and materials.
   ○ Strongly Disagree
   ○ Disagree
   ○ Neither Agree nor Disagree
   ○ Agree
   ○ Strongly Agree

9. Decisions about the school are made by the principal.
   ○ Strongly Disagree
   ○ Disagree
   ○ Neither Agree nor Disagree
   ○ Agree
   ○ Strongly Agree

10. New courses or curriculum materials are seldom implemented.
    ○ Strongly Disagree
    ○ Disagree
    ○ Neither Agree nor Disagree
    ○ Agree
    ○ Strongly Agree

11. I have regular opportunities to work with other teachers.
    ○ Strongly Disagree
    ○ Disagree
    ○ Neither Agree nor Disagree
    ○ Agree
    ○ Strongly Agree
APPENDIX F

12. Students in this school are well behaved.
   ○ Strongly Disagree
   ○ Disagree
   ○ Neither Agree nor Disagree
   ○ Agree
   ○ Strongly Agree

13. Video equipment, tapes, and films are readily available.
   ○ Strongly Disagree
   ○ Disagree
   ○ Neither Agree nor Disagree
   ○ Agree
   ○ Strongly Agree

14. I have very little say in the running of the school.
   ○ Strongly Disagree
   ○ Disagree
   ○ Neither Agree nor Disagree
   ○ Agree
   ○ Strongly Agree

15. We are willing to try new teaching approaches in my school.
   ○ Strongly Disagree
   ○ Disagree
   ○ Neither Agree nor Disagree
   ○ Agree
   ○ Strongly Agree
APPENDIX F

16. I seldom discuss the needs of individual students with other teachers.
   ○ Strongly Disagree
   ○ Disagree
   ○ Neither Agree nor Disagree
   ○ Agree
   ○ Strongly Agree

17. Most students are motivated to learn.
   ○ Strongly Disagree
   ○ Disagree
   ○ Neither Agree nor Disagree
   ○ Agree
   ○ Strongly Agree

18. The supply of equipment and resources is not adequate.
   ○ Strongly Disagree
   ○ Disagree
   ○ Neither Agree nor Disagree
   ○ Agree
   ○ Strongly Agree

19. Teachers in this school are innovative.
   ○ Strongly Disagree
   ○ Disagree
   ○ Neither Agree nor Disagree
   ○ Agree
   ○ Strongly Agree
APPENDIX F

20. Classroom instruction is rarely coordinated across teachers.
   - Strongly Disagree
   - Disagree
   - Neither Agree nor Disagree
   - Agree
   - Strongly Agree

21. Good teamwork is not emphasized enough at my school.
   - Strongly Disagree
   - Disagree
   - Neither Agree nor Disagree
   - Agree
   - Strongly Agree

Demographic Questions, 22-27

22. What is your role?
   - Teacher
   - Administrator (Principal or Assistant Principal)
   - Other

23. What is your gender? (M or F)
   - Male
   - Female
APPENDIX F

24. What is your age?
- 20-29
- 30-39
- 40-49
- 50-59
- 60-69
- 70+

25. How do you identify your race or ethnicity?
- American Native
- Asian
- Black-not Hispanic
- Hispanic
- White-not Hispanic
- Other

26. How many years of experience do you have in education?
- 0-5
- 6-10
- 11-15
- 16-20
- 21-25
- 26+

27. How many schools have you worked in during your career in education?
- 1-3
- 4-6
- 7-9
- 10+
APPENDIX G

LIBERTY UNIVERSITY
INSTITUTIONAL REVIEW BOARD

February 16, 2016

Clyde Reginald Alston
IRB Exemption 2407.021616: A Quantitative Study of Teacher and Administrator Perceptions of School Climate

Dear Reggie,

The Liberty University Institutional Review Board has reviewed your application in accordance with the Office for Human Research Protections (OHRP) and Food and Drug Administration (FDA) regulations and finds your study to be exempt from further IRB review. This means you may begin your research with the data safeguarding methods mentioned in your approved application, and no further IRB oversight is required.

Your study falls under exemption category 46.101(b)(2), which identifies specific situations in which human participants research is exempt from the policy set forth in 45 CFR 46:101(b):

(2) Research involving the use of educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures or observation of public behavior, unless:
(i) information obtained is recorded in such a manner that human subjects can be identified, directly or through identifiers linked to the subjects; and (ii) any disclosure of the human subjects' responses outside the research could reasonably place the subjects at risk of criminal or civil liability or be damaging to the subjects' financial standing, employability, or reputation.

Please note that this exemption only applies to your current research application, and any changes to your protocol must be reported to the Liberty IRB for verification of continued exemption status. You may report these changes by submitting a change in protocol form or a new application to the IRB and referencing the above IRB Exemption number.

If you have any questions about this exemption or need assistance in determining whether possible changes to your protocol would change your exemption status, please email us at irb@liberty.edu.

Sincerely,

G. Michele Baker, MA, CIP
Administrative Chair of Institutional Research
The Graduate School