

PERCEPTUAL DIFFERENCES IN SCHOOL CLIMATE BETWEEN ADMINISTRATORS  
AND TEACHERS WITHIN CHRISTIAN SCHOOLS

by

Cheryl Turner Cavanaugh

Liberty University

A Dissertation Presented in Partial Fulfillment

Of the Requirements for the Degree

Doctor of Education

Liberty University

2019

PERCEPTUAL DIFFERENCES IN SCHOOL CLIMATE BETWEEN ADMINISTRATORS  
AND TEACHERS WITHIN CHRISTIAN SCHOOLS

by Cheryl Turner Cavanaugh

A Dissertation Presented in Partial Fulfillment

Of the Requirements for the Degree

Doctor of Education

Liberty University, Lynchburg, VA

2019

APPROVED BY:

Michelle J. Barthlow, Ed.D., Committee Chair

Katie Thompson, Ed.D., Committee Member

## ABSTRACT

School climate has been researched for the past 100 years. However, there is a lack of school climate research focused on perceptual differences between school leaders and teachers. It is important to evaluate stakeholder differences, as principals are tasked with forming the climate of the school and teachers are responsible for relaying that climate to students. Furthermore, there is a lack of school climate studies conducted in private Christian schools. Christian school leaders need school climate data to help sustain and improve Christian education. The purpose of this causal comparative study is to evaluate perceptual differences between administrators and teachers in Christian schools in the southeast region of the United States. The participants were chosen from a convenience sample of high school teachers and administrators from Association of Christian Schools International (ACSI) member schools in the southeast region of the United States ( $n = 50$  teachers and  $n = 50$  administrators). The participants received an email requesting them to complete a survey by clicking on the survey link and responding to the questions. Data were collected from participants' responses to the revised School-Level Environment Questionnaire. Multivariate analysis of variance was used to determine if perceptual differences exist between teachers and administrators. The data analysis produced three significant findings. There were statistically significant differences in the *overall* school climate domain, the *decision-making* domain, and the *school resources* domain. This study reveals the specific areas in which Christian school educators should focus their attention in order to improve their school climate. Recommendations for further research include replicating this study in additional Christian school regions to increase generalizability.

*Keywords:* school climate, Christian education, teacher-administrator perceptions

## Dedication

I dedicate this dissertation to my parents, who are now in the presence of the Lord. They taught my siblings and me how to work hard and love Jesus. The desire of my mother's heart was for people to see Jesus in her children's lives. Mama, we strive every day to live up to that expectation. I choose daily to decrease so Christ can increase (John 30:30). Additionally, I dedicate this work to my other parents, Gene and Annette Cavanaugh. You have loved and supported me just like I was your own.

I also dedicate this work to my family, my tribe. To my husband, Jody, you have been my rock and my biggest cheerleader. Thank you for believing in me even when I did not. To my children (Landon, Logan, Luke, and Lexi), you are my reason for striving every day to be my best version. Thank you for making me complete and reminding me daily of the goodness of God.

## Acknowledgments

“How wonderful it is that nobody need wait a single moment to improve the world” (Anne Frank). I long to make the people and environments around me better. This desire is what drives my passion for school climate research. I never want to waste a precious moment God has given me. My desire is to live life to the fullest and impact others for good.

There are many individuals who have impacted my life, especially during the years I spent completing this dissertation. First of all, I thank my Lord and Savior, Jesus Christ, for giving me the focus, strength, and favor to complete this journey. Through all the struggles I faced, God has been faithful.

To my Liberty Christian Academy and New Beginnings family, thank you for your support and encouragement. Grandma Annette and Jennifer Miller, thank you for your editing skills; I would trust none other. Thank you Staci Sellers for the endless hours of running errands and helping me with my children so I could work. Toni Henderson, thank you for keeping all my affairs in order so I could pursue my passions. Gina Shepard, thank you for walking beside me all these years and leading New Beginnings. To my church family and close friends, I appreciate your patience with me over the years as I poured my life into my calling.

Dr. Barthlow, my dissertation chair, you were sent straight from God. Thank you for your concern, professionalism, and amazing statistical skills. You made this journey obtainable. Dr. Thompson, thank you for your support and helping me with my last minute requests. You are appreciated!

## Table of Contents

ABSTRACT .....	3
Dedication .....	4
Acknowledgments .....	5
List of Tables .....	10
List of Figures .....	11
List of Abbreviations .....	12
CHAPTER ONE: INTRODUCTION.....	13
Overview.....	13
Background.....	13
Historical Overview .....	14
Social Context.....	15
Theoretical Framework.....	16
Problem Statement .....	18
Purpose Statement.....	19
Significance of the Study .....	20
Research Question .....	21
Definitions.....	21
CHAPTER TWO: LITERATURE REVIEW.....	23
Overview.....	23
Theoretical Framework.....	23
Mezirow’s Transformative Learning Theory.....	23
Attraction-Selection-Attrition Theory .....	26

Related Literature.....	28
School Climate Defined.....	29
School Climate Outcomes.....	33
School Climate Domains .....	36
Instructional Domain or Teaching and Learning.....	39
Community Domain or Relationships .....	43
Institutional Environment Domain .....	48
Gap in Literature.....	50
Summary.....	52
CHAPTER THREE: METHODS.....	53
Overview.....	53
Design .....	53
Research Question .....	54
Null Hypotheses.....	54
Participants and Setting.....	55
Instrumentation .....	56
Procedures.....	58
Data Analysis .....	60
CHAPTER FOUR: FINDINGS.....	62
Overview.....	62
Research Question .....	62
Null Hypotheses.....	62
Descriptive Statistics.....	63

Results.....	64
Data Screening.....	64
Assumption Tests.....	65
Tests of Normality .....	65
Assumption of Multivariate Normal Distribution.....	67
Assumption of Homogeneity of Variance-Covariance Matrices.....	68
Absence of Multicollinearity .....	69
Results for Null Hypotheses 1–6 .....	70
CHAPTER FIVE: CONCLUSIONS .....	72
Overview.....	72
Discussion.....	72
Null Hypothesis 1 .....	73
Null Hypothesis 2 .....	74
Null Hypothesis 3 .....	75
Null Hypothesis 4 .....	76
Null Hypothesis 5 .....	77
Null Hypothesis 6 .....	79
Implications.....	79
Limitations .....	81
Recommendations for Future Research.....	83
REFERENCES .....	84
Appendix A: Written Permission.....	110
Appendix B: IRB Approval Letter.....	111



Appendix C: Informed Consent ..... 112

**List of Tables**

Table 1: Descriptive Statistics .....	64
Table 2: Between-Subjects Factors.....	66
Table 3: Tests of Normality .....	66
Table 4: Box's Test of Equality of Covariance Matrices .....	69
Table 5: Pearson Correlations .....	69
Table 6: Wilks' Lambda .....	70
Table 7: ANOVA Results for Each Dependent Variable ( $n = 50$ ) .....	71

**List of Figures**

Figure 1: Box-and-Whisker Plot for all Dependent Variables.....	65
Figure 2: Scatterplot for the Teacher Group.....	67
Figure 3: Scatterplot for the Administrator Group .....	68

### **List of Abbreviations**

Association of Christian Schools International (ACSI)

Multivariate Analysis of Variance (MANOVA)

Revised School Level Environment Questionnaire (r-SLEQ)

## **CHAPTER ONE: INTRODUCTION**

### **Overview**

Chapter One provides background information regarding school climate research. A historical overview is provided to explain how the research on school climate has evolved over time. The theories that drive the body of school climate literature are explained. The chapter then presents the problem statement and the purpose of this study. The chapter concludes with an exposition on the significance of this research, followed by a list of pertinent definitions.

### **Background**

School climate can be described as the unique personality of a school, the values and behaviors that establish the core of the school's atmosphere (Thapa, Cohen, Guffey, & Alessandro, 2013). A school's climate is the school's "heart and soul" (Freiberg & Stein, 1999). Recent research demonstrates that climate is directly related to school success (Cornell & Bradshaw, 2015; McCarley, Peters, & Decman, 2016), thereby worthy of investigation. A positive school climate leads to teacher longevity (Ramsey, Spira, Parisi, & Rebok, 2016), improved student outcomes (Benbenishty, Astor, Roziner, & Wrabel, 2016; Hattie, 2008; Maxwell, Reynolds, Lee, Subasic, & Bromhead, 2017), and decreased dropout rates (Thapa et.al., 2013).

Moreover, researchers recognize the role school leaders play in establishing the school's climate. Gülşen and Gülenay (2014) emphasize that a school's leader is the primary catalyst in forming a school's unique climate. Principals help shape the unique character of a school (Yoon, 2016). Moreover, both principals and teachers are the key players in school reform and improvement (Yoon, 2016). Therefore, school leaders must be keenly aware of teachers' perceptions of the school climate, since teachers "form the bridge from administration to

classroom” (Price & Moolenaar, 2015, para. 3). Teachers’ perceptions of their school leaders’ attitudes and overall school climate relate more to teacher turnover than other school variable (Torres, 2016). School principals’ leadership practices influence teacher buy-in, teachers’ beliefs, innovation, and teachers’ compliance with policies (Torres, 2016; Yoon, 2016). Therefore, school climate research must recognize the importance of evaluating the unique perspectives of principals and teachers and their roles in shaping the culture.

### **Historical Overview**

Historically, school climate has been an important issue in education for over 100 years (Dewey, 1916; Perry, 1908). School climate was first recognized as an important factor of schooling by Perry (1908). Perry (1908) stressed the importance of recognizing the various influences on school culture, some direct and others indirect. Moreover, he attributed the overall school climate directly to the principal’s actions and beliefs. Dewey (1916) also recognized that the climate shapes a student’s life. In the 1960s, Durkheim (1961) further developed Dewey’s work on the influence of a connected social group on a child’s development. In the 1970s, researchers acknowledged that the climate and environment affect children’s learning and behavior (Bronfenbrenner, 1979; Kohlberg & Mayer, 1972). By the 1980s, more research emerged revealing that positive school climate decreases student and teacher absenteeism (DeJung & Duckworth, 1986; Gottfredson & Gottfredson, 1989; Purkey & Smith, 1983; Reid, 1982; Rumberger, 1987; Sommer, 1985). Over the past 30 years, there has been an increased interest and growing body of research on school climate. Researchers in the 1990s recognized that students’ self-esteem and mental wellness were positively influenced by school climate (Cairns, 1987; Heal, 1978; Hoge, Smit, & Hanson, 1990; Kuperminic, Leadbeater, Emmons, & Blatt, 1997; Power, Higgins, & Kohlberg, 1989; Reynolds, Jones, St. Leger, & Murgatroyd,

1980; Rutter, Maughan, Mortimore, & Ouston, 1979).

More recently, research has emerged revealing positive school climates decrease violence and aggression in school (Attar-Schwartz, 2009; Blaya, 2006; Gregory et al., 2010; Kosciw & Elizabeth, 2006). Educators agree that a positive climate leads to improved student achievement (Finnan, Schnepel, & Anderson, 2003; Ghaith, 2003; Kerr, Ireland, Lopes, Craig, & Cleaver, 2004; Mattison and Aber, 2007). The Centers for Disease Control and Prevention (2009) recognized the power of school climate and defined it as “the belief by students that adults and peers in the school care about their learning as well as about them as individuals.” The Centers for Disease Control recommended that school climate data be used for school reform (Thapa et al., 2013).

Research in the past decade has focused on stakeholder perceptions of school climate, recognizing the importance of evaluating differences in individual indicators from students and teachers’ perspectives (Fan, Williams, & Corkin, 2011; Johnson & Stevens, 2006; Schneider & Duran, 2010). A growing body of research during this period compared teacher and student perspectives. A large quantitative study conducted by Mitchell, Bradshaw, and Leaf (2010) analyzed the perspectives of teachers and students in a sample of 1,881 students and 90 teachers. The study revealed differing perspectives of teachers and students on specific school climate indicators. Teachers focused on classroom level factors, and students focused more on school level indicators (Mitchell et al., 2010). Understanding various stakeholders’ perspectives is important to school improvement (Bryk, Sebring, Allensworth, Luppescu, & Easton, 2010; Guo & Higgins-D’Alessandro, 2011).

### **Social Context**

The research on school climate over the years has had meaningful implications on

improving communities and society. The federal government uses school climate data to drive school reform. Since 2010, the government has funded the Safe and Supportive Schools grant to help states evaluate their schools' climate for school improvement efforts (U.S. Department of Education, 2010). The U.S. Department of Education provides this funding, recognizing the social implications of a positive climate, including "character and moral education, civic education, social emotional learning, developmental assets and community schools, and risk prevention/mental health promotion efforts that protect children and promote essential social, emotional, ethical, and civic learning" (Thapa et al., 2013, p. 369).

School climate research has led to data driven factors to improve schools and the well-being of children, thus benefitting society. Positive climates reduce high school dropout rates (Thapa et al., 2013), thereby benefitting the fiscal economy. The U.S. Department of Labor (2019) reports that the unemployment rate is three times higher for high school dropouts than for college graduates. High school dropouts earn less money than their peers (Messacar & Oreopoulous, 2013). Moreover, school improvement reforms informed by school climate data result in a decrease in violence among students (Benbenishty et al., 2016). Ultimately, society benefits from the outcomes of a positive school climate.

### **Theoretical Framework**

Many theories have informed previous literature regarding school climate, including Maslow's hierarchy of needs, Herzberg's two-factor theory, transformational leadership, systems theory, and systems view of school climate (Rudasill, Snyder, Levinson, & Adelson, 2018). This study is informed by those theories but is primarily driven by Mezirow's transformative learning theory. Transformative learning theory proposes that individuals' belief systems are deeply embedded by adulthood and can only be changed through a transformational process involving



self-reflection, self-analysis, and training. A crisis or conflict may be the catalyst for a shift in adults' worldview (Christie, Carey, Robertson, & Grainger, 2015). Transformative learning theory helps people understand how to become aware of and confront their previously held beliefs and work toward establishing new thoughts and behaviors. For schools to improve, educators must be willing to evaluate their beliefs, recognize areas of weakness, and make changes where necessary (Christie et al., 2015).

One study that demonstrates how teachers' beliefs can be changed by transformative learning theory is a qualitative case study conducted by Meijer, Kuijpers, Boei, Vrieling, and Geijsel (2017). The researchers emphasized that more than ever before, educators must be able to adapt to rapidly changing norms and situations within their schools. Through professional development focused on the process of transformative learning, educators can continue to improve their practices and become innovative instructors. In this study, teachers were given 30 hours of professional development focused on promoting self-awareness, influencing teacher beliefs, and implementing inquiry-based learning. The researchers asserted that professional development can help shift the attitudes and personalities of teachers. The results of this study indicate that all participating teachers, through transformative learning, experienced a change in their beliefs and an increase in critical reflection that led to innovation in the classroom. Transformative learning theory is not just one's acquisition of new knowledge. It is a process in which a person's beliefs are transformed. Teachers cannot improve their practices if they are not aware of their perceptions of them.

Additionally, attraction-selection-attrition theory shapes this study on school climate perceptions. Attraction-selection-attrition theory rationalizes that employees and their work environment are synonymous. The people who work for a company determine the how the work

environment feels and behaves (Schneider, 1987). An organization's climate attracts potential employees (Zhao & Wu, 2014). A business is much more than the sum of its policies and procedures. The true character of an organization is how the personnel develop the climate and culture. Attraction-selection-attrition theory emphasizes that a company's leaders are the ones who ultimately "shape the organizational cultures, processes, policy, and structures" (Schneider, 2001).

In conclusion, the importance of school climate is not a new phenomenon. Educators recognize the value of using school climate data for school reform. The underlying theories that support school climate research are valuable in bringing a contextual understanding to the issue. However, gaps still exist in the literature that need to be explored to assist schools in improvement efforts to aid in their sustainability and success.

### **Problem Statement**

Research on school climate over the past 100 years has provided evidence of the positive outcomes of a healthy school climate. The current body of literature on school climate indicates positive climates increase teacher retention (Cohen, 2014a; Collie, Shapka, & Perry, 2012), impact students' mental and physical health (Aldridge & Fraser, 2018; Thapa et al., 2013), improve student academic outcomes (Goddard, Goddard, & Kim, 2015; Thapa & Cohen, 2013), and promote safer schools (Cornell & Bradshaw, 2015; Hartup & Stevens, 1997; Hughes, Cavell, & Jackson, 1999). However, the current literature on school climate has not completely explored the impact of school climate from multiple perspectives. Therefore, there is not enough research available to bring the issue to closure. Thapa et al. (2013) urges researchers to begin studying school climate from many perspectives. Although current research finds its roots in previous research, this study expands on their recommendations and adds to the knowledge of the

influence of school climate. There is limited research of school climate from the viewpoints of administrators and teachers, who are the ones responsible for transmitting the desired climate of the school. Few school climate researchers have explored the connection between principals' and teachers' views of climate (Price & Moolenaar, 2015). According to MacNeil, Prater, and Busch (2009), a school cannot successfully impact learning when its stakeholders have incongruent beliefs and attitudes. Perceptual differences among school leaders and teachers need to be exposed and reconciled for a school to accomplish its mission.

Additionally, previous literature reveals a lack of research regarding school climate in a Christian school setting. This unique setting needs to be studied because Christian schools have distinct characteristics, heavily focused on their climate (Fosnacht & Broderick, 2018). Overall, the problem is the body of research lacks exploration of the differences in principal and teacher perspectives, and it lacks research conducted in a Christian school setting.

### **Purpose Statement**

The purpose of this causal comparative study is to determine if there are significant differences between teacher and administrator perceptions of school climate in Christian schools. Administrator and teacher responses on the Revised School-Level Environment Questionnaire (r-SLEQ) were analyzed to determine if they differ significantly on school climate perceptions overall, and on the following school climate domains: collaboration, instructional innovation, decision-making, school resources, and student relations. The collaboration domain measures how well educators communicate and work together as a team to make coordinated decisions to benefit students. Instructional innovation measures how willing staff members are to try new ideas and educational approaches. The decision-making domain measures the extent to which educational decisions are made based on shared input from teachers. The domain of school

resources evaluates if the school has sufficient instructional equipment, materials, and resources. Finally, student relations measure the behaviors and attitudes students have toward school and staff members (Johnson, Stevens, & Zvoch, 2007).

The participants for the study were drawn from a convenience sample of high school teachers and administrators employed at Association of Christian Schools International (ACSI) member schools in the southeast region of the United States (Alabama, Georgia, Mississippi, North Carolina, South Carolina, Tennessee, and Virginia) during the spring semester of the 2019-2020 school year. The teachers and administrators (independent variables) were asked to participate in the r-SLEQ. Administrators are defined as the school's lead official, including the roles of principal, assistant principal, or headmaster. Teachers are defined as full-time certified professionals, excluding part-time teachers and paraprofessionals. From their responses, the researcher compared mean scores of administrators and mean scores of teachers to determine if they demonstrate statistically significant differences in school climate perspectives (dependent variable).

### **Significance of the Study**

This study adds to the existing body of knowledge on school climate and provides data that can be used to improve education and help sustain Christian schools. School climate research is worth pursuing as a crucial aspect of school reform and continuous improvement. School climate research provides data that will assist in maintaining healthy and successful schools (McGiboney, 2016). Since there is a lack of research on administrator and teacher perceptual differences regarding school climate, the current study assists in addressing the problem by adding to the literature on school climate perceptions.

The current study contributes to educational research by providing new data that can aid

in school improvement and reform. As Rudasill et al. (2018) reports, previous research on school climate typically uses a single stakeholder perspective and assumes that viewpoint represents the entire school community. More research needs to be conducted that analyzes perceptual differences from various vantage points. Once the differences are exposed, they can be reconciled to advance school improvement. For schools to succeed, principals and teachers need to have a “shared vision for change” (Heck & Hallinger, 2010, p. 228). Collaborative leadership between school personnel leads to improved school outcomes (Heck & Hallinger, 2010). Moreover, educators who work in a cohesive environment are more innovative and have a greater commitment to the teaching profession (Waller, 2014).

Christian schools nationwide are experiencing a decrease in enrollment and an increase in school closures since 2006 (ACSI, 2017). The decline in Christian education deserves consideration (Ewert, 2013). The National Center for Education Statistics describes the decrease in Christian school enrollment as an unexpected phenomenon (National Center for Educational Statistics, 2015). School climate perceptions are important to study because the future of Christian education is at stake. Research can produce valuable evidence to assist school leaders in best practices to keep Christian schools flourishing and avoiding closure (Ewert, 2013).

### **Research Question**

This study sought to answer the following research question:

**RQ1:** Is there a difference between teacher and administrator perceptions of school climate in Christian schools?

### **Definitions**

1. *Revised SLEQ* – A survey instrument used to measure indicators of school climate (Johnson et al., 2007).

2. *School Climate* – The character of a school, including the “norms, values, and expectations that support people feeling socially, emotionally, and physically safe” (Cohen, McCabe, Michelli, & Pickeral, 2009, p. 182).
3. *ACSI* – The largest Christian school association in the United States that supports Christian education by providing resources, training, and accreditation for Christian schools (ACSI, 2018b).
4. *Administrator* – A school site manager and leader who is responsible for the supports for teaching and learning (Rigby et al., 2017).
5. *Teacher* – A qualified educator who facilitates instruction in the classroom (North Carolina Department of Education, 2018).
6. *Perceptions* – The beliefs, feelings, and attitudes of educators regarding their environment (Aldridge & Fraser, 2016).
7. *Collaboration* – Educators communicating and working together as a team to make coordinated decisions (Johnson et. al., 2007).
8. *Instructional Innovation* – The willingness to try new ideas and educational approaches (Johnson et. al., 2007).
9. *Decision-making* – The process in which educational decisions are made based on shared input from teachers (Johnson et. al., 2007).
10. *School Resources* – Instructional equipment, materials, and resources (Johnson et. al., 2007).
11. *Student relations* – The behavior and attitude students have toward school and staff members (Johnson et. al., 2007).

## CHAPTER TWO: LITERATURE REVIEW

### Overview

Chapter Two opens with the theoretical framework for this study. Mezirow's transformative learning theory and attraction-selection-attrition theory provide the unique lens through which the reader can understand the importance of staff perspectives of school climate. Mezirow's transformative learning theory purports that worldviews and perspectives of adults are important to inquire about, and these beliefs can only be changed through a transformational process. Moreover, attraction-selection-attrition theory supports the value of understanding an organization's unique climate. Next, the chapter provides an extensive review of current literature on school climate and exposes the significant impact school climate has on the learning environment. Lastly, the gaps in the research surrounding school climate are examined.

### Theoretical Framework

There are two major theories that shape this research. Mezirow's transformative learning theory and attraction-selection-attrition theory provide the theoretical framework for this study. These theories have informed the literature related to school climate and support the importance of evaluating educators' perspectives of school climate.

### Mezirow's Transformative Learning Theory

Mezirow's transformative learning theory describes the developments that adults experience when their perspectives are transformed through a process of self-reflection, self-analysis, and the acquisition of new skills (Mezirow, 1991). Transformative learning theory assumes that adults have deeply embedded beliefs, or frames of reference, that shape their perspectives (Mezirow, 1991, 1997). Adults have a natural inclination to reject concepts that do not fit within their preconceived perspectives or habits (Mezirow, 1997). In the process of

transformational learning, adults become more self-reflective and can assess their personal beliefs and biases (Mezirow, 2003). Moreover, it is difficult for adults' perspectives to change since their beliefs are heavily ingrained into their consciousness, much like a habit. For their worldview to change, a crisis or conflict occurs to challenge their thinking. Mezirow refers to this conflict as a "disorienting dilemma" (Mezirow, 1991, chapter 6). For example, the dilemma can be the death of a loved one, divorce, failing a test, or reading an inspiring book (Mezirow, 1991). When people realize their beliefs are flawed, they seek to change them (Christie et al., 2015). Transformative learning theory helps people understand how to successfully challenge their previously held presumptions, be open to other points-of-view, and work toward establishing new thoughts and behaviors (Mezirow, 1998a). The purpose of transformative learning theory is to create a better community (Christie et al., 2015). In relation to educators, teachers and principals can be lifelong learners who are willing to critically analyze their previously held assumptions and change those that are faulty (Christie et al., 2015).

According to transformative learning theory, adults can be trained to be critical thinkers who are willing to continuously assess the relevance and truth of their held beliefs. The focus of transformative learning is to teach people to be reflective and independent thinkers. When people learn from their dilemmas, they can experience a shift in thinking and learn from their past experiences (Calleja, 2014). For educators, this change of perspective occurs when learners become reflective and recognize the hidden influences in their lives (Calleja, 2014). When adults allow themselves to be open to other points-of-view, transform their assumptions, and accept new information, they are engaged in transformative learning (Mezirow, 1998b).

Transformative learning shapes adults with new beliefs and practices.

The process of transformative learning theory is ongoing and multi-dimensional. The



first phase of Mezirow's transformative learning involves "disorienting dilemma" (Mezirow, 1991, chapter 6). Adult learners experience problems that challenge their worldview.

Transformation occurs when they work to resolve the dilemma by changing old habits or beliefs for new ones. During this process, learners reflect and are aware of preconceived ideas that are faulty or restrictive. Learners experience ten phases that lead to an ultimate transformation in their thinking. Mezirow's ten phases of transformation are:

- Phase 1: a disorienting dilemma
- Phase 2: a self-examination with feelings of guilt or shame
- Phase 3: a critical assessment of epistemic, sociocultural, or psychic assumptions
- Phase 4: recognition that one's discontent and the process of transformation are shared and that others have negotiated a similar change
- Phase 5: exploration of options for new roles, relationships, and actions
- Phase 6: planning of a course of action
- Phase 7: acquisition of knowledge and skills for implementing one's plans
- Phase 8: provisional trying of new roles
- Phase 9: building of competence and self-confidence in new roles and relationships
- Phase 10: a reintegration into one's life on the basis of conditions dictated by one's perspective (Mezirow, 1991, Chapter 6, Section 4, para. 3).

When learners experience this critical self-reflection, they will be able to experience a transformation in judgement, knowledge, conscience, and attitudes. Mezirow's transformative learning theory is valuable when evaluating teachers' and school leaders' perspectives of school climate. Through self-reflection, varying perspectives can be identified and assessed. Staff and

principals can acquire knowledge and skills, through professional development, that will unite them in an effort to foster a positive school climate (Meijer et al., 2017).

Mezirow's transformative learning theory was shaped by important philosophers. Thomas Samuel Kuhn's (1970) work paved the way for transformative learning. Kuhn (1970) redefined scientific inquiry as a paradigm instead of a linear process of thinking. He argued that researchers must understand the complex worldviews, attitudes, and methods involved in scientific inquiry (Mezirow, 1991). He emphasized the importance of people's worldviews and perspectives. Kuhn (1970) coined the term "paradigm shift" (p. 10), recognizing that as the conceptual framework changes, new research methods must change also.

Mezirow's transformative learning theory was also influenced by Habermas's theory of communicative action (Mezirow, 1991). Habermas believed in the value of communication. In a practical application, language is the basis of understanding, and it allows people to interact with each other. Habermas exposed the importance of validating people's perspectives. Communication is built upon the assumptions that people are relaying truthful and accurate information. Validating the importance of what people say and imply is critical for healthy communication (Calleja, 2014). Likewise, Mezirow recognized that transformation can occur through the interpretation of communication, a process that involves reflection and insight (Mezirow, 1998a).

### **Attraction-Selection-Attrition Theory**

Additionally, attraction-selection-attrition theory provides another theoretical framework for school climate research. Schneider's (1987) attraction-selection-attrition theory purports that people within an organization determine the organization's character. Schneider theorized that businesses were functions of the people within them (Schneider, 1987). Schneider (1987)

describes the attraction-selection-attrition cycle that employees experience when they become part of an organization. Employees choose to work for an organization because they are attracted to the culture (Zhao & Wu, 2014). The attraction-selection-attrition cycle begins when individuals are attracted to a job. Organizations select employees who share similar values and are compatible with the organization's goals. Lastly, attrition occurs when a person no longer fits within the organization's culture, and they leave. Schneider (1987) introduced the attraction-selection-attrition theory and emphasized that "environments and people are not separable and that the people in an environment make it what it is" (p. 440). The people within the organization are responsible for the climate because they determine how the organization "looks, feels, and behaves" (Schneider, 1987, p. 437). Organizations are not the sum of their policies and procedures; they are defined by the behaviors and personalities of the people within them.

Attraction-selection-attrition theory has important implications for school climate research. Schneider (1987) defines climate as what a company "rewards, supports, and expects" (p. 448). Within an attraction-selection-attrition framework, leaders can understand their organization's climate. Through attraction and selection, people within an organization hold similar viewpoints and beliefs. Thereby, the climate is established when the people within it transmit their shared values.

Regarding school improvement, attraction-selection-attrition theory provides an important perspective. Schneider (1987) emphasizes that organizations have failed to change because they are attempting to change their processes instead of changing their people. Knowing and understanding the climate is vital. According to Schneider (1987), successful environments are created when the people in the organization know the climate well. After understanding the environment and the perspectives of the people in it, organizations must adapt to the

organization's changing needs.

The attraction-selection-attrition theory is particularly important for private Christian schools. Christian schools are founded by entrepreneurs or religious organizations who choose to establish a school based on alignment with their core values. The attraction-selection-attrition theory asserts that the organization's leaders "shape the organizational cultures, processes, policy, and structures" (Schneider, 2001). With the contemporary school choice movement in America, schools must compete for students and staff. In North Carolina, private Christian school leaders have had to work hard to overcome negative stigmas of Christian education. Therefore, it is important for Christian schools to understand their school climate, recognize differences that may exist among its stakeholders, and reconcile these differences in order to create an optimal school culture that attracts students and staff. The attraction-selection-attrition theory "determines why organizations look and feel different from each other" (Schneider, 1987, p. 440). In a world of school choice and competition, Christian schools would benefit from understanding attraction-selection-attrition within their organizations and know their competitive advantage over other school choice options.

### **Related Literature**

The existing general knowledge on the topic of school climate reveals the many benefits a positive school climate has on school success, school improvement, and students' well-being (Aldridge & Fraser, 2018; Y. Goddard et al., 2015; Thapa et al., 2013). However, previous literature reveals a lack of research regarding school climate in a Christian school setting. The related literature informs this study by signifying the need for Christian schools to examine their school climate in an effort to support school sustainability and success. Moreover, there is a lack of research that seeks to understand the unique relationship between principals and teachers

regarding school climate. This study will address the gap in current school climate research and provide further understanding for Christian educational leaders.

### **School Climate Defined**

Over 100 years ago, school climate was first recognized as an important aspect (Dewey, 1916; Perry, 1908). As a school leader in the early twentieth century, Perry (1908) wrote a guidebook entitled *The Management of a City School*. In 330 pages, Perry teaches school leaders how to manage all aspects of a school from collaboration with stakeholders, academic progress, availability of resources, safety, and moral development. Perry (1908) recognized the impact school leaders had on the climate of a school and encouraged principals to create a school culture of moral order. Before school climate was correlated to school success, early educators articulated the aspects of school climate that from their prospective produced a well-managed school.

Likewise, educational philosopher John Dewey (1916) did not write specifically about school climate, but he acknowledged the influence of a school's environment on a child's life. Dewey (1916) recognized the social community that existed within schools and the importance of a child's surroundings and their experiences with them. Dewey (1916) asserted:

No thought, no idea, can possibly be conveyed as an idea from one person to another . . . only by wrestling with the conditions of the problem first hand, seeking and finding his own way out, does he think the joy which children themselves experience is the joy of intellectual constructiveness. (p. 166)

Dewey (1916) believed that educators could not ignore the influence of the environment on a child's development. He expounded on the philosophy that students develop through experiencing and manipulating their environment. Dewey (1916) understood the magnitude of a

school's climate, its resources and environment. Dewey (1916) directly related the acquisition of knowledge to a child's experience with natural objects. Successful education of the whole child includes the aggregate of the child's total experience in their social surroundings (Dewey, 1916). Dewey (1916) referred to the total school environment as the "sphere of school instruction" (p. 313), as he understood the range of factors that affected student outcomes.

Educational philosophers such as Perry (1908) and Dewey (1916) have advanced the modern understanding of school climate and school reform. More recently, specifically within the last fifty years, school climate has been respected as vital in school improvement (Cohen, 2012), and a growing body of literature has emerged revealing the outcomes of a positive school climate. School climate is one of the most important determiners of school success (McCarley et al., 2016). As school climate has been regarded as vital to improving schools and student outcomes, it has become necessary to clearly define climate and its domains.

There is not a universally accepted definition of school climate (Wang & Degol, 2016). However, school climate can be defined as:

Patterns of people's experiences of school life and reflects norms, goals, values, interpersonal relationships, teaching and learning practices, and organizational structure. A sustainable, positive school climate fosters youth development and learning necessary for a productive, contributive, and satisfying life in a democratic society. This climate includes norms, values, and expectations that support people feeling socially, emotionally and physically safe. (National School Climate Council, 2007, p. 4)

Freiberg and Stein (1999) define school climate simply as "the heart and soul of the school" (p. 11). A school's climate is what makes students, parents, and teachers love school and enjoy being there daily. School climate is the unique character and personality of a school.

People understand school climate through their personal perceptions of what they experience. Researchers characterize school climate through the vantage points of school stakeholders, including teachers, students, school leaders, and parents. The personality of a school's climate may differ between people's unique experiences and points-of-view. Therefore, it is important to understand various stakeholders' perceptions and their role in school climate research.

There is an abundance of literature on students' perceptions of school climate. Researchers recognize that students and the school environment are synonymous, and students' perceptions of their school climate are vital (Aldridge et al., 2016, p. 17). The body of literature assessing students' perspectives reveals students focus more on school-wide aspects such as student-staff relationships (Thapa et al., 2013). To meet children's developmental needs, they need to feel they belong and are accepted within their school community (Berg & Aber, 2015). When students feel they belong, they are more likely to seek help from teachers (Wang et al., 2014). However, not all students in the same school share similar perceptions of school climate. Students' perceptions vary greatly, depending on their background, demographics, and socioeconomic statuses (Berg & Aber, 2015; White, La Salle, Ashby, & Meyers, 2014). In a recent study by Pena-Shaff, Bessette-Symons, Tate, and Fingerhut (2019), race was the leading predictor of perceptions of school climate. Student perceptions varied by their race. Moreover, students react to their experiences based on their personal perceptions or frame of mind (Gage, Larson, Sugai, & Chafouleas, 2016). Therefore, student perceptions directly affect their behavior at school.

Regarding school faculty perceptions, research reveals teachers are more concerned with classroom factors of the environment, such as student discipline and teaching practices (Thapa et

al., 2013). There are many noteworthy studies that focus on teachers' perspectives of the school environment. These studies give educators insights on teaching efficacy, effective instructional practices, teacher turnover, and the impact of stakeholder relationships (Lim & Eo, 2014; Oder & Eisenschmidt, 2018; Ozen, 2018). Other recent studies examine teachers' perceptions of their stress levels and mental health factors associated with school climate (Malinen & Savolainen, 2016; McLean, Abry, Taylor, Jimenez, & Granger, 2017). Another important faculty perspective to consider is that of the school leader; however, fewer studies have been conducted from this vantage point. Principals' leadership styles and their influence on staff directly affect school climate and indirectly impact student outcomes (Bellibas & Liu, 2018; Urick & Bowers, 2014). The literature regarding principals' leadership and their influence on school climate mainly focus on transformative or distributed leadership practices, and more research is needed from the school leader's point of view (Bellibas & Liu, 2018).

Furthermore, parents' viewpoints help researchers understand school climate. Parents' attitudes toward the school greatly matter because parents influence the child's attitude toward school, affect parental involvement, and impact student enrollment in private schools (Schueler, Capotosto, Bahena, McIntyre, & Gehlbach, 2014). With the rise in school choice options, parental perspectives are vitally important. In a study conducted by Sakiz (2017), the perspectives of parents are valued as a holistic approach to school climate and school reform.

Researchers are also understanding the value of evaluating school climate from multiple informants. Some studies have gathered data from multiple stakeholders. However, the majority of school climate research focuses only on one stakeholder's perspective rather than multiple viewpoints (Ramsey et al., 2016, p. 630). In a case study, James, Smallwood, Noltemeyer, and Green (2018) assessed school climate by collecting data from multiple informants. The



researchers surveyed teachers, students, and school leaders; and parents participated in focus groups. The results produced comprehensive data for the school's improvement process and revealed the variances in stakeholder concerns and perspectives. In another noteworthy study by Ramsey et al. (2016), the researchers expose the benefits of using multiple informants when measuring school climate. The researchers analyzed data from 4,244 students, 3,133 parents, and 727 staff members. The results of this study reveal that perceptual differences among stakeholders existed at the individual level, and not the school level. Therefore, school improvement efforts should address individual relationships, such as parent communication and student-teacher relations.

Perceptions of school climate can be quantified through several reliable and validated survey instruments. Since students' views vary depending on demographics and economic factors, it is important to frequently measure students' perceptions. For example, White et al. (2014) validated a survey instrument, The Georgia Brief School Climate Inventory, that is simple and easy to frequently administer. To understand teachers' perspectives, instruments such as the Delaware School Climate Survey–Teacher/Staff were found to be reliable and informative (Bear, Yang, Pell, & Gaskins, 2014). The r-SLEQ also provides reliable data (Rentoul & Fraser, 1983). Researchers have created valid instruments to understand parents' perspectives (Bear, Yang, & Pasipanodya, 2015) and to assess multiple stakeholder views, such as the Baltimore City Public School System Climate Survey (Ramsey et al., 2016).

### **School Climate Outcomes**

School climate research has revealed an array of profound outcomes of a positive school climate. Evidence-based strategies that arise from school climate research have been used by policy makers and educators to improve schools and reform the educational system. The Centers

for Disease Control and Prevention (2009) advises school climate research to be used as an evidence-based method to create healthy schools and reduce the dropout rate (Thapa et al., 2013). The United States government urges Local Educational Agencies to use school climate surveys to improve practices in schools within their districts (U.S. Department of Education, 2016). Cohen (2014a) purports that school climate reform is data-driven strategy used for school improvement that promotes character education and social-emotional learning. With the No Child Left Behind legislation, school districts are encouraged to include data from school climate surveys into their School Improvement Plans to measure and foster improved student outcomes (Cleveland & Sink, 2017).

A noteworthy outcome of a positive school climate is greater teacher retention (Cohen, 2014a; Collie et al., 2012). Teachers' working conditions affect their decision to leave the teaching profession (Ramsey et al., 2016). Ingersoll (2001) conducted a landmark study, which is one of the largest studies on teacher retention. He analyzed 6,733 teacher surveys from the National Center for Educational Statistics to discover reasons for teacher turnover. The results reveal several school climate influences for teachers leaving the profession, including lack of support, limited resources, and student behaviors (Ingersoll, 2001).

In a more recent quantitative correlational study of public-school teachers in North Carolina, Burkhauser (2017) collected survey data across four school years to assess teachers' perceptions of the principals' role in school climate and working conditions. This study focused on the correlation between the school's leadership and school climate in an effort to inform and combat teacher turnover. Burkhauser (2017) analyzed the data from the *North Carolina Teacher Working Conditions Survey* using a value-added assessment measurement approach to determine the role of the principal on the teachers' perceptions of school climate. The results indicate that

principals significantly impact the working environment and teacher satisfaction. The principal's influence on the school climate directly correlates to teacher satisfaction and retention.

Moreover, school climate impacts students' health, mentally and physically. Research documents that positive school climates increase students' self-esteem and combats the negative effects of criticism (Aldridge & Fraser, 2018; Thapa et al., 2013). The intention of school climate reform is to create emotionally, socially, and intellectually healthy students (Cohen, 2014b). Schools can transform and improve when students' social and emotional well-being drives school improvement. A healthy school climate promotes improvements in the psychological well-being of students (Nijs et al., 2014; Rathmann et al., 2018). Aldridge and Fraser (2016) found significant direct and indirect relationships between school climate factors and students' overall well-being. London, Westrich, Stokes-Guinan, and McLaughlin (2015) also related a positive school climate to the healthy physical development of students. Moreover, school climate directly affects student attendance (Sakiz, 2017; Van Eck, Johnson, Johnson, & Bettencourt, 2017) and drop-out rates (Kotok, Ikoma, & Bodovski, 2016).

One of the most significant outcomes of a positive school climate is increased student achievement. A positive learning environment motivates students to learn (Thapa et al., 2013; Reynolds, Lee, Turner, Bromhead, & Subasic, 2017). A healthy school climate also assists in closing the achievement gap between students from differing socio-economic levels (Berkowitz, Moore, Astor, & Benbenishty, 2017). School climate variables have a substantial positive effect on academic achievement, especially in low-income schools (Sulak, 2016). Additionally, school climate affects teacher instructional practices and innovative ideas, thereby producing better outcomes for students (Y. Goddard et al., 2015). More information regarding student learning outcomes is discussed in the Instructional Domain section below.

## **School Climate Domains**

Out of the body of literature regarding school climate, common categories have emerged that define the specific “multidimensional” (Wang & Degol, 2016, p. 317) domains that create a school’s climate. The following five common areas of school climate have emerged in the literature: safety, academics, relationships, the physical environment, and school engagement (Ramsey et al., 2016; Thapa et al., 2013; Wang & Degol, 2016). The subsequent information reviews the research conducted on each domain.

### **Safety**

Safety is referred to as the “physical safety, emotional safety, and order and discipline” within a school (Wang & Degol, 2016, p. 324). Maslow’s hierarchy of needs emphasized the importance of children feeling safe (Maslow, 1943). In his hierarchy, the most basic physiological needs of children must be met before their higher-level needs can be achieved. Children must feel safe before they can learn. When the basic needs of food, safety, and love are not met, all other needs are pushed aside and ignored as the child is motivated to fulfill these needs first (Maslow, 1943).

School climate research supports Maslow’s theory of motivation. Studies show that safe schools have a positive school climate (Hartup & Stevens, 1997; Hughes et al., 1999). Moreover, Elsaesser, Gorman-Smith, and Henry (2013) found that students’ beliefs and their perceptions of the school climate are directly related to safety risks. Students who do not believe in violence and feel their campuses are safe are less likely to be victimized. Students’ perceptions of their school environment were correlated with their perceptions of aggression on their campus.

Research conducted by Henry, Farrell, Schoeny, Tolan, and Dymnicki (2011) revealed

that school climate influences student aggression. A total of 5,106 middle school students participated in this study, which examined the relationship between student aggression and school climate. The participating schools represented various regions across the United States, including Georgia, Illinois, North Carolina, and Virginia. The categories of school climate that were analyzed were relationships among students, relationships between students and teachers, and school safety. Data were collected during a Multisite Violence Prevention Project, with a goal of training students and teachers against aggression. The results revealed that school climate had significant effects on school violence for both boys and girls. This study suggests that schools train students and staff on non-violent behaviors to reduce the occurrences of aggression. A strong school culture against aggression reduces violence. A positive school climate can predict lower levels of violence.

Positive school climates also reduce bullying behaviors in schools (Bosworth & Judkins, 2014; Cornell & Bradshaw, 2015; Espelage, Low, & Jimerson, 2014; Wang, Berry, & Swearer, 2013). School climate has the potential to reduce victimization, violence, and bullying in schools (Cornell, Shukla, & Konold, 2015). Once bullying decreases, academic achievement increases (Berkowitz et al., 2015; Lacey & Cornell, 2016; Thapa et al., 2013). Lacey and Cornell (2016), researched the relationship between bullying and academic achievement in high school. The researchers collected data from 301 Virginia high schools and found that bullying prevention programs were associated with greater student success on state mandated tests.

Moreover, a recent study examined the relationship between school climate and drug use in schools and found that a positive school climate reduces substance abuse (Doumas, Midgett, & Johnston, 2017). The researchers sampled 489 middle and high school students and administered the Substance Use and School Climate Survey. The results reveal that students

who reported a positive school climate reported less drug use than those who perceived a poor school climate. There was a significant relationship between victimization and alcohol use in middle school and high school. However, there was a significant relationship between victimization and drug use in only high school students. This study supports previous research that purports a positive school climate can combat the prevalence of drug abuse. Moreover, bullying victimization is directly related to drug use.

In a recent study conducted by Fisher, Viano, Curran, Pearman, and Gardella (2018), the researchers analyzed the effects of an authoritative school climate on school safety. The results of this study reveal that students experience greater feelings of safety when the school's leaders have a more authoritative approach to discipline. Authoritative structures refer to discipline that is stern and consistent (Fisher et al., 2018). An authoritative school climate results in fewer reports of bullying on campus (Gerlinger & Wo, 2014).

Research reveals that when children feel safe at school, they perform better academically (Akiba, 2010; Lcoe, 2013; Nijs et al., 2014). In a longitudinal quantitative research project, Lcoe (2013) analyzed the effects of an unsafe environment on the academic achievements of middle school students in New York City. He analyzed survey data from over 340,000 students across four years. The survey questions focused on students' perceptions of their safety in the classroom setting. The students' academic achievement was measured by their scores on the annual state math exam. The results show that students who felt unsafe produced lower math test scores than the students who felt safe.

Likewise, Burdick-Will (2013) analyzed assessment data from Chicago Public Schools and crime data from the Chicago Police Department to discover a correlation between safety and academic achievement for eleventh grade students. Academic achievement was measured by

student scores on the Prairie State Achievement Exam and their grade-point average. Safety was measured by the number of crimes committed in the school district. The results of this study indicate that crime rates had a negative impact on students' test scores but not on their overall grade-point average. The link between crime and student scores was contributed to interruptions in learning.

### **Instructional Domain or Teaching and Learning**

The instructional domain of school climate refers to teaching and learning, leadership, and professional development (Wang & Degol, 2016). Teaching and learning encompasses the social, emotional, ethical, civic, and service learning. It also refers to the supports for academic learning, including professional relationships and stakeholders' perceptions (Thapa et al., 2013). There is an abundance of literature to support academic gains due to positive school climates. Maxwell et.al. (2017) purport that a positive school climate is the key factor related to student achievement. Overall, the literature supports that a positive school climate improves teaching and learning, thereby resulting in improved academic outcomes (Guo & Higgins-D'Alessandro, 2011; McCoy, Roy, & Sirkman, 2013; Mitchell et al., 2010). School climate greatly contributes to teacher effectiveness (Ihtiyaroglu & Ottekin Demirbolat, 2016).

Many studies have focused on high school student outcomes. Researchers have found student outcomes are positively related to school climate (Hampden-Thompson & Galindo, 2017; Maxwell et al., 2017; Reynolds, Lee, Turner, Bromhead, & Subasic, 2017). Lee and Bryk (1989) analyzed data from 10,187 sophomores and seniors in 160 schools and found that a positive school climate improved the students' math scores. The relationship between climate and academic performance was also studied by Stewart (2008) and revealed that a positive school climate increased academic achievement. The researchers emphasized that academic

improvements need to start with school climate. In another study, Benbenishty, et al. (2016) examined the relationship between school climate and academic success. In a quantitative analysis, they analyzed data from 3,172 schools. Their results substantiate that school climate and academic performance are significantly positively related.

More recently, a quantitative study examined the relationship between school climate and academic achievement as measured by outcomes on standardized testing with students in middle and high school. The results indicated that school climate improved scores in writing and math but not reading (Reynolds et al., 2017). In a major 15-year project, Hattie (2008) synthesized over 800 meta-analyses relating to school achievement. Hattie analyzed data from millions of students and produced the largest research project evidencing the influence of a positive school climate on improving learning for students.

In a longitudinal study conducted by Maxwell et. al (2017), survey and achievement data were analyzed from 2,257 high school students and 760 staff members through multilevel modeling. The participants answered 38 questions on the School Climate and School Identification Measurement Scale. Additionally, the researchers collected and analyzed testing data from the students' nationally normed standardized tests. The results demonstrate that a positive perception of school climate significantly influences students' testing scores in reading, writing, and math.

In another correlational school climate study, Back, Polk, Keys, and McMahon (2016) surveyed 208 high school teachers and gathered student achievement data from the district's average ACT scores. The teachers answered 24 questions on a survey regarding effective classroom management. The researchers sought to determine if a significant relationship existed between the classroom environment and testing scores. Structural equation modeling revealed



that school climate was positively related to higher ACT scores. The findings of this study demonstrate that “classroom management and school staff relations, respectively, predict higher ACT scores, and they do so by improving school climate” (Back et al., 2016, p. 404).

Conversely, Wang et al. (2014) found that poor school climates lead to lower student achievement. In this study, 1,023 students in fifth grade completed surveys (Sense of School as a Community Scale and Vaillancourt and Hymel Bullying Involvement Questionnaire) to measure their perceptions of school climate. The students’ parents were also interviewed by phone. To measure achievement, the researchers gathered the students’ final grade-point average from the participants’ fifth-grade year. The results demonstrate that individuals’ perception of poor school climate was correlated with lower grade-point averages.

Moreover, researchers have studied the relationship of school climate and academic achievement for students of low socio-economic statuses. Berkowitz, Astor, et al. (2017) reveal that a positive climate can compensate for the negative academic effects students of low socioeconomic backgrounds encounter. Positive school climates provide academic gains for those of low socioeconomic status. Likewise, 500,000 students in California were surveyed to discover their perceptions of school climate relative to academic achievement. The study revealed a significant relationship between positive school climates and grade point averages, irrelevant of the students’ socio-economic statuses (O’Malley, Voight, Renshaw, & Eklund, 2015).

Moreover, school climate has a positive impact on student achievement when educators use innovative strategies for teaching (Goddard & Kim, 2018). Innovation is “the introduction of something new and useful, for example new methods, techniques or practices or new or altered products and services” (Zhu & Engels, 2014, p. 136). Instructional innovation refers to

educators using new teaching approaches and innovative ideas. Y. Goddard et al. (2015) examined the effects of differentiated instruction, as an innovative teaching technique, on student achievement. In their research, achievement data in math and reading were collected from 5,031 elementary school students. Teachers from 78 schools completed surveys, rating their use of differentiated instructional practices. The results of the analyses reveal differentiated instruction accounted for higher levels of achievement in reading and math.

Similarly, high quality instruction proved to yield greater student outcomes in a study conducted by Mitchell and Sackney (2016). In this case study, the researchers sought to analyze schools that implemented innovative, high quality teaching practices. The research reveals that innovative school climates support teachers trying new strategies (Mitchell & Sackney, 2016). Furthermore, school leaders' innovative leadership styles affect student outcomes. Shatzer, Caldarella, Hallam, and Brown (2014) compared the effects of instructional and transformational leadership on student achievement. Researchers surveyed 590 teachers to collect information on their principals' innovative leadership styles. Academic achievement was measured by student scores on their annual standardized tests. The results indicate student achievement is affected by leadership practices, particularly instructional leadership.

Research on school climate also provides important implications for Christian school academics. Evidence-based character education or value-based programs have been shown to improve academic achievement (Bradshaw, Koth, Thornton, & Leaf, 2009). Payton et al. (2008) analyzed major studies involving the impact of a social-emotional learning program on students' grades. Combined, the studies included 324,303 students in elementary and middle schools. This project revealed that the value-based program directly improved students' grades by 17%.

In a positive school climate, students are more motivated to learn. Lin, Salazar, and Wu (2018) surveyed 7,219 undergraduate students to gather data on their level of satisfaction as related to the school climate. They found that students who had high satisfaction were more motivated to learn, which produced higher grades. A positive school climate impacts student motivation and academic outcomes. Contrariwise, Reindl, Berner, Scheunpflug, Zeinz, and Dresel (2015) studied the effects of a negative school climate on students' motivation in mathematics. The researchers analyzed data from 4,100 students in middle and high school. Student motivation and negative school climate were both measured by student surveys. The results of the study show that a negative school climate had significant negative effects on students' motivation to learn math. The more negative the climate, the less motivated students were to learn.

### **Community Domain or Relationships**

School climates are shaped by the relationships or connectedness of the people within them. The relationship or community domain of school climate refers to the "quality of relationships, connectedness, respect for diversity, and partnerships" (Wang & Degol, 2016, p. 323). This domain emphasizes the need to recognize student achievement and offer positive behavior incentives. As students and teachers develop mutual trust, students know their voices are important in class discussions (Bradshaw, Waasdorp, Debnam, & Johnson, 2014). When students feel they belong to a community, their academic and social behaviors improve (Grover, Limber, & Boberience, 2015).

The teacher and student relationship is among the most important in a school environment. Recent studies have demonstrated the positive effects of the teacher-student relationship (Mainhard, Brekelmans, & Wubbels, 2011; Spilt, Koomen, & Thijs, 2011).

Teachers value their connectedness with students (Ghavifekr & Pillai, 2016). Mitchell and Bradshaw (2013) studied the influence of teacher-student relationships on the school climate. Data were collected from 1,902 students and 93 teachers. The results indicated that positive behavior strategies used by teachers in the classroom resulted in positive student-teacher relationships and an enhanced school climate.

To add to the body of knowledge regarding teacher-student relationships, Masko (2018) studied the relationship between climate and positive student-teacher relationships. In a qualitative study over a period of seven months, Masko (2018) collected survey and observational data from middle school students in an urban area. The researcher observed the behaviors between teachers and students and categorized the following common traits of teachers: caring, knowing the curriculum, and teaching for understanding. These factors are vital in building relationships with students. Positive relationships between students and teachers are essential to quality educational programs (Masko, 2018).

Moreover, positive student-teacher relationships reduce occurrences of violence and bullying within the classroom. In a quantitative study, Thornberg, Wänström, Pozzoli, and Gini (2018) found that victimization was reduced in classes with positive teacher-student relations. In this study, 899 elementary students completed surveys related to bullying and school climate. The data was analyzed, and the results support previous literature that caring relationships between students and teachers increase student-student relationships, lowers student disengagement, and reduces bullying.

Additionally, the relationships that exist among the school leaders and teachers are an indicator of school climate. A recent study noted the power of the relationship between leaders and teachers and purported that transformational leaders inspire teachers, cause teachers to be

more engaged at school, and produce better student outcomes (McCarley et al., 2016). There is a powerful connection between a supportive principal and a good teacher (McCarley et al., 2016), and this relationship affects the overall school climate. In a recent study on the positive effects of school climate and teacher satisfaction, Ghavifekr and Pillai (2016) noted that teachers build positive relationships with their principals and school leaders when they are confident in the leaders' competence and professionalism.

Teachers feel trusted and supported when they are asked to collaboratively participate in decision-making. Shared decision-making directly affects school climate. To promote a climate of justice, teachers' ideas need to be a part of the decisions that are made (Burns & DiPaola, 2013). Moreover, staff perceptions of the quality of the work environment affect teachers' ability to implement change i.e. "change efficacy" (Malloy et al., 2015, p. 1087). In a study conducted by Malloy et al. (2015), researchers sampled teachers from Chicago who were already participating in a longitudinal study implementing a new school-wide program called Positive Action. The researchers sought to discover if teachers who were involved in collaborative efforts such as shared decision-making had higher occurrences of implementing the new program. The results reveal that teachers who were involved in innovation and decision-making taught more Positive Action lessons, and they taught them with a higher quality of teaching by including supplemental materials.

In addition to the principal-teacher relationship, colleague relations among staff members themselves are important indicators of school climate. Research has examined how well teachers collaborate with their colleagues and help each other (Wang & Degol, 2016). When teachers feel supported by their colleagues and principal, they stay in the career of teaching longer (Fulton, Yoon, & Lee, 2005; Singh & Billingsley, 1998). When teachers feel supported by

others in the profession, they believe they can make a positive impact on student learning (Guo & Higgins-D'Alessandro, 2011; Hoy & Woolfolk, 1993). A positive school climate, established by supportive relationships, prevents teachers from feeling exhausted and burned out (Grayson & Alvarez, 2008; Higgins-D'Alessandro, 2002). Aldridge & Fraser (2016) studied the relationship between teachers sense of efficacy and school climate. Their study revealed that teachers are more satisfied with their jobs when their principals are relational and approachable. This study supports that school climate, particularly the domain of relationships, positively affects teacher efficacy and prevents attrition.

The connectedness of parents and teachers is another vital relationship that affects school climate. Parents' attitudes and perceptions of the school climate affect how well their children perform in school (Bear et al., 2015). Research suggests that the quality of the relationship between parents and teachers is more important than the amount of parent and teacher contact (Minke, Sheridan, Kim, Ryoo, & Koziol, 2014). Quality relationships between parents and teachers involves trust, respect, and sensitivity. In a study conducted by Minke et al. (2014), the quality of the parent-teacher relationship was analyzed to discover its effects on student behavior and academic outcomes. Teachers with a positive view of their connectedness with parents reported less incidences of negative behaviors.

Furthermore, parent-teacher relationships lead to greater parental involvement and decreased behavioral problems. Santiago, Garbacz, Beattie, and Moore (2016) studied the relationship between parent-teacher trust and student outcomes. The researchers collected survey data from 212 parents of elementary students in the northwestern United States. The surveys gathered information regarding parental trust, student behavior, and parental involvement. The results indicated a positive correlation between parental trust and positive

student behaviors. Additionally, parents with high levels of trust in the teacher were more involved in the school's activities. Parental involvement in the school benefits the school climate (Berkowitz, Astor, et al., 2017). When parents attend school-wide activities, participate in parent organizations, and volunteer in the classroom, they contribute to positive outcomes for students. In a meta-analysis, Castro et al. (2015) found that parental involvement leads to higher academic achievement for students when parents communicate with school staff, have high expectations for their children, and read with their children at home. Parental collaboration and involvement are important aspects of school climate.

Additionally, community involvement impacts school climate. The relationships school stakeholders establish within the local community impact the school's success and affects student outcomes. Students benefit when school leaders collaborate with community resources to establish referral systems for students with exceptional and health needs (Voight & Nation, 2016). To improve students' learning experiences, schools can partner with other schools or universities to enhance resources for students (Voight & Nation, 2016). School climate is improved when students are actively involved within the community. According to Checkoway and Aldana (2013), when students engage in civic responsibilities, they become responsible members of society instead of causing problems in the community. When students take action to improve society, they also improve their school climate (Checkoway & Aldana, 2013).

To understand the effect community collaboration has on school climate, Karakos, Voight, Geller, Nixon, and Nation (2016), collected survey data from 4,939 students in middle school in the southeastern region of the United States. The surveys gathered information regarding the students' participation in civic activities and their perceptions of their school climate. For this study, civic engagement included activities such as volunteering in the

community and helping at local churches. Data analyses revealed that student civic participation was significantly related to a positive school climate, specifically in the areas of relationships and discipline. Students who participate in community activities indicate a more positive perception of school climate.

### **Institutional Environment Domain**

In relation to school climate, the institutional environment refers to the “environmental adequacy, structural organization, and availability of resources” (Wang & Degol, 2016, p. 323). The inadequacy of resources and supplies can lead to negative teacher efficacy and a negative school climate. When students and teachers have access to adequate resources, the school climate is positive (Miles & Darling-Hammond, 1998). School resources also influence students’ academic performance (Greenwald, Hedges, & Laine, 1996). Research shows that students with access to sufficient resources perform better academically than their counterparts who do not have available support resources (Han & Bridglall, 2009). The amount of money a school spends on expenditures is related to student performance.

Resource allocation impacts student achievement (Greenwald et al., 1996; Wang & Degol, 2016). Baker (2012) posits that the amount of money spent per pupil is positively associated with higher academic scores. In a recent study using structural equation modeling, Della Sala, Knoepfel, and Marion (2017) analyzed the effects of resources on student achievement. The researchers collected data from 470 elementary schools in the southeastern United States. Fifteen variables were included in the study: teacher salary, teacher degree, number of professional development days, class size, budget for instruction, enrollment, poverty index, number of gifted students, number of special education students, number of retained students, teacher turnover, teachers under contract, principal longevity, school achievement, and



age of students. The results of this study reveal a direct relationship between student characteristics and achievement scores. Student poverty had a negative impact on student achievement.

Institutional environment also refers to the physical structure of the building and setting (Thapa et al., 2013). Temperature, noise, and adequate lighting in a classroom influence a student's perception of school climate. The physical setting impacts teaching and learning (Dawson & Parker, 1998). In a descriptive analysis, Dawson and Parker (1998) collected data from teachers during a school renovation. They found that the condition of the school buildings affects student academic achievement and teacher efficacy (Dawson & Parker, 1998). The teachers' perceptions of work conditions are important indicators of school climate (Bear et al., 2014).

Bradshaw et al. (2014) investigated the institutional environment in a study involving over 25,000 high school students. The researchers noted the importance of the physical environment in relation to school climate, particularly the physical condition of the buildings and the grounds. The cleanliness and comfort of the schools were also investigated. The results of their study validated previous claims that school climate is positively correlated with the quality of the environment. The researchers noted that students were less likely to succeed academically when they perceived their campus as being in disorder and disruptive. A well-maintained and peaceful environment leads to greater student success (Bradshaw et al., 2014).

Additionally, Maxwell (2016) investigated the relationship between the school building condition and school climate. Data was retrieved from 143,788 middle school students in the state of New York. Researchers collected building inspection reports and archival survey information from the NYC Department of Education. School climate data was gathered from

school climate surveys. The results of the study explain a direct relationship between building conditions and student outcomes. The physical conditions of the school buildings predicted student achievement scores. Moreover, the better the condition of the school building, the higher school climate ratings were. Furthermore, the students who reported higher school climate ratings scored higher on standardized tests.

The institutional environment also refers to class size (Wang & Degol, 2016). Research over the past two decades supports positive academic outcomes for students in small class sizes (Mathis, 2017). The teacher-child ratio significantly impacts learning (Finn & Achilles, 1999). Jackson, Johnson, and Persico (2016) studied the effects of the institutional environment on economic outcomes. After analyzing archival school funding data from 28 states over a span of forty years, the researchers discovered significant gains in student outcomes when spending increased. These improvements were substantially contributed to lower teacher-child ratios.

### **Gap in Literature**

There is an abundance of research on school climate and its positive effects on school success and student outcomes. However, the majority of school climate research focuses only on one group's perspective (either the students, staff, or parents) rather than multiple perspectives (Ramsey et al., 2016). Few researchers have explored the relationship between the perspectives of more than one stakeholder, such as both staff and students (Maxwell et al., 2017). There is even less research focused on the perspectives of both principals and teachers (Price & Moolenaar, 2015). The variances, if any, between principal and teacher perspectives are important to study. Principals depend on teachers to bridge the gap between administration and the classroom (Price & Moolenaar, 2015). In the field of education, there is a lack of knowledge about the important relationships that exist between principals and teachers and the

effects of these relationships on school climates. Heck and Hallinger (2010) explain that principals have a direct influence on the learning environment as transmitted through their influence on the teaching staff. Therefore, research needs to be conducted on this unique relationship between principals and teachers.

This study is particularly important for Christian school leaders. In Christian schools, the principals serve as caretakers of the core values of the school. They monitor and manage the induction of the school's values and beliefs (Hall & Hord, 2001). The principal is the values-leader (Saphier & King, 1985). However, the principal's success implementing the school's values depends on the cooperation of teachers, who are transmitting the values to students (Heck & Hallinger, 2010).

As important as climate research is for Christian schools, surprisingly there is a lack of school climate research conducted in Christian school settings. From searching data bases for peer-reviewed journals, minimal evidence-based studies have been conducted on climates in Christian schools. A few studies have collected data on students' perceptions of school climate in religious schools (Fosnacht & Broderick, 2018; Rockenbach & Mayhew, 2014). Another study analyzed differences in school climates between public and private religious schools (Shakeel & DeAngelis, 2018). However, studies have not been conducted that compare stakeholders' perceptions of school climates in Christian schools.

Studying school climate in Christian schools is particularly important for the future of Christian education. Christian schools nationwide are experiencing a decrease in enrollment and an increase in school closures since 2006, according to Association of Christian Schools International (ACSI, 2017). The decline in Christian education deserves attention (Ewert, 2013). The National Center for Education Statistics describes the decrease in Christian school

enrollment as an unexpected phenomenon (National Center for Educational Statistics, 2015). School success, as defined within the domains of school climate, is important to study because the future of Christian education is at stake. School climate research can produce valuable evidence to assist school leaders in best practices to keep Christian schools flourishing and avoiding closure (Ewert, 2013).

### **Summary**

In conclusion, the outcomes of school climate have been researched for over 100 years. The field of education has benefited from previous studies, and educators are aware of the valuable outcomes that occur when the school climate is healthy. Moreover, a comprehensive approach to school reform considers the multidimensionality of the school climate indicators explained within this literature review. Although school climate gravely impacts student outcomes, there is limited research of school climate from the viewpoints of administrators and teachers, who are the ones responsible for transmitting the desired climate of the school. Moreover, research has not examined staff perspectives of school climate in Christian schools. This perspective needs to be studied because Christian schools have distinct characteristics, with a focus on a climate that is set apart by a Christian worldview. Christian schools have the unique opportunity to inculcate value-based programs on their campuses, thereby improving academic outcomes. Christian school leaders are tasked with setting the vision of the school. If there are perceptual differences among school leaders and teachers, the differences need to be exposed and reconciled for the school to accomplish its mission.

## CHAPTER THREE: METHODS

### Overview

Chapter three describes the rationale behind the design for this study. After presenting the research questions and hypotheses, the chapter explains the participants, setting, and instrumentation. Next, the procedures for the study are explained in detail. The chapter concludes by providing a concise rationale for the type of statistical analysis that was used to test the hypotheses.

### Design

This study employed a quantitative, causal-comparative design to compare administrators' and teachers' perspectives of school climate. The purpose of causal-comparative research is to investigate a relationship between independent and dependent variables in order to understand educational phenomena (Gall, Gall, & Borg, 2007). According to Johnson (2001), causal-comparative research requires categorical variables and statistical analysis. Through non-experimental investigation, this study examined naturally occurring variations, without manipulation, to determine if the groups (teachers and administrators) differed on the dependent variable (perspectives of school climate). Since the independent variable was measured in categories, casual-comparative was the most appropriate research design.

For this study, high school teachers and principals in ACSI secondary schools (independent variables) from the southeast region of the United States were asked to participate in the r-SLEQ. From their responses, the researcher compared mean scores of administrators and mean scores of teachers to determine if they demonstrated statistically significant differences in school climate perspectives (dependent variable). A non-experimental causal comparative design was most appropriate for this study because school climate is not a phenomenon that is

appropriate for manipulation in controlled experiments (Gall et al., 2007). Causal-comparative research designs have been used for similar studies that examine the differences between two groups regarding perceptions of school climate (Alston, 2017; Duff, 2013).

### Research Question

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

**RQ1:** Is there a difference between teacher and administrator perceptions of school climate in Christian schools?

### Null Hypotheses

The null hypotheses for this study are:

**H<sub>0</sub>1:** There is no statistically significant difference between teacher and administrator perceptions of *overall* school climate using the revised School-Level Environment Questionnaire (r-SLEQ).

**H<sub>0</sub>2:** There is no statistically significant difference between teacher and administrator perceptions of the *collaboration* domain of school climate using the revised School-Level Environment Questionnaire (r-SLEQ).

**H<sub>0</sub>3:** There is no statistically significant difference between teacher and administrator perceptions of the *instructional innovation* domain of school climate using the revised School-Level Environment Questionnaire (r-SLEQ).

**H<sub>0</sub>4:** There is no statistically significant difference between teacher and administrator perceptions of the *decision-making* domain of school climate using the revised School-Level Environment Questionnaire (r-SLEQ).

**H<sub>0</sub>5:** There is no statistically significant difference between teacher and administrator perceptions of the *school resources* domain of school climate using the revised School-Level

Environment Questionnaire (r-SLEQ).

**H<sub>06</sub>:** There is no statistically significant difference between teacher and administrator perceptions of the *student relations* domain of school climate using the revised School-Level Environment Questionnaire (r-SLEQ).

### **Participants and Setting**

The participants for the study were drawn from a convenience sample of high school teachers and administrators employed at ACSI member schools in the southeast region of the United States (Alabama, Georgia, Mississippi, North Carolina, South Carolina, Tennessee, and Virginia) during the spring semester of the 2019–2020 school year. A convenience sample was chosen for this study because of the ease and accessibility of obtaining participants (Gall et al., 2007). The researcher is a member of ACSI and easily obtained access to member schools. The target population from which the sample was drawn included all teachers and administrators of Grades 9–12 in ACSI member schools in the southeast region of the United States ( $N = 100$ , 66 females and 34 males). To keep the number of participants equal in each group, the researcher selected the first 50 teacher responses and the first 50 administrator responses. The sample size of 50 per group is sufficient for a medium effect size with a statistical power of .7 at the .05 alpha level, according to Warner (2013). The response rate was anticipated to be 10%. ACSI accredited schools were chosen for this study because accredited schools demonstrate educational quality and effectiveness. ACSI accreditation verifies the schools are “striving for excellence based on a solid Christian philosophy of education foundation” (ACSI, 2018b).

There are 244 ACSI member private high schools in the southeast region of the United States. North Carolina is described as a rural area with the demographic makeup including White (71%), Black (22.2%), American Indian (1.6%), Asian (2.9 %), Native Hawaiian (0.1%),

and more than 2 races (2.2%; U.S. Census Bureau, 2018). ACSI high school principals' salaries range from \$38,218 – \$57,685 (ACSI, 2018c). ACSI teacher salaries range from \$25,145-\$36,642 (ACSI, 2018c).

This study focused on the school climate perceptions of two groups: teachers and administrators of ACSI secondary schools. Administrators were defined as heads of schools, principals, or assistant principals. The two groups of participants received an email requesting their voluntary participation in the r-SLEQ survey. The survey was administered electronically through Survey Monkey. The participants clicked the link in the email directing them to the survey. The participants identified their role within the school and their demographic information before completing the questions on the r-SLEQ. The group consisting of teachers ( $n = 50$ ) was comprised of 7 males and 43 females, to include 92% White, 6% Black, and 2% Hispanic. The teachers' ages ranged from 2% age 18-24, 22% age 25-34, 22% age 35-44, 30% age 45-54, 16% age 55-64, and 8% over age 65. Their years of experience ranged from 60% with 0-5 years, 12% with 6-10 years, 6% with 11-15 years, 8% with 16-20 years, and 14% with 21 or more years' experience. The group consisting of administrators ( $n = 50$ ) included 27 males and 23 females, including 92% White, 6% Black, 2% Hispanic. The administrators' ages ranged from 8% age 25-34, 10% age 35-44, 50% age 45-54, 22% age 55-64, and 10% over age 65. Their years of experience ranged from 14% with 0-5 years, 18% with 6-10 years, 10% with 11-15 years, 12% with 16-20 years, and 46% with 21 or more years of experience.

### **Instrumentation**

The instrument used to measure teachers' and administrators' perceptions of school climate was the r-SLEQ. This survey contains 21 questions and measures school climate on a five-point Likert-scale, ranging from strongly disagree to strongly agree. The questions on the r-



SLEQ include inquiry regarding staff access to resources, student behavior, teacher collaboration, shared decision-making, and instructional strategies.

The original SLEQ was created by Rentoul and Fraser (1983) in Sydney, Australia. The original instrument was a Likert-scale survey consisting of 56 questions spanning eight domains of school climate (Johnson & Stevens, 2001). Rentoul and Fraser (1983) conducted a validity study on the SLEQ by administering the survey to two groups of teachers. Internal consistency for the SLEQ had a mean score of 0.82 for all the domains measured, demonstrating “satisfactory internal consistency” (Rentoul & Fraser, 1983, p. 30).

Researchers discovered a need “for a revised SLEQ with fewer factors and fewer items” (Johnson & Stevens, 2001, p. 340). Johnson et al. (2007) revised the SLEQ into a condensed format consisting of 21 questions and five domains. They conducted a validity study of the r-SLEQ by administering the revised instrument to 4,920 teachers in a large school district in the United States. Exploratory and confirmatory factor analyses were used, and reliability statistics were run. Additionally, ANOVAs analyzed the data from the surveys across all participating schools. The study demonstrated that the instrument has high reliability. Internal consistency of the r-SLEQ is 0.90 for overall school climate, 0.82 for collaboration, 0.78 for decision-making, 0.79 for instructional innovation, 0.86 for student relations, and 0.77 for school resources (Johnson et al., 2007).

The r-SLEQ was scored by calculating the mean score of individual responses for the positively-worded questions (1, 2, 4, 5, 6, 7, 8, 11, 12, 13, 15, 17, 19) after assigning scores as follows: 1 = Strongly Disagree, 2 = Disagree, 3 = Neither Agree nor Disagree, 4 = Agree, 5 = Strongly Agree. For the remaining negatively-worded questions (3, 9, 10, 14, 16, 18, 20, 21), the researcher assigned the following scoring system: 5 = Strongly Disagree, 4 = Disagree, 3 =

Neither Agree nor Disagree, 2 = Agree, 1 = Strongly Agree and then calculated the mean score (Johnson et al., 2007).

The r-SLEQ is appropriate for this study because it is a tool that investigates educators' perceptions of school climate. Its short form provides ease for participants to complete the survey in a short period of time. Research has demonstrated that this tool provides valuable information for educators who need data for school improvement (Johnson et al., 2007).

The instrument was used in numerous peer-reviewed studies. Johnson and Stevens (2006) investigated the relationship between school climate and student achievement. The researchers administered the SLEQ to 1,115 teachers in the southwestern region of the United States. This study demonstrated a positive relationship between school climate and student achievement. Moreover, Aldridge and Fraser (2016) conducted a study to examine the relationship between school climate and teacher efficacy. The researchers administered the r-SLEQ to 781 teachers. Additionally, Basak (2016) utilized the r-SLEQ instrument in a correlational research study that examined the relationship between school climate and the career stages of school teachers. More recently, Matteucci, Guglielmi, and Lauer mann (2017) utilized the r-SLEQ to measure teacher perceptions of school climate in their quantitative research study. The researchers emphasized that teachers' perceptions are directly linked to effective learning environments (Matteucci et al., 2017). The r-SLEQ has proven to be a useful instrument that has initiated improvements in education. Before the instrument was utilized in the current study, permission was requested and granted from Dr. Bruce Johnson (r-SLEQ author) of the University of Arizona. See Appendix A for the permission email.

### **Procedures**

The first steps in this study included requesting institutional review board (IRB) approval

from Liberty University (See Appendix B). Since the risks to the participants were quite low, there was no issue with approval from the IRB. After receiving IRB approval, the researcher requested approval from ACSI to conduct research within their accredited schools. Following ACSI and IRB approval, the research department of ACSI forwarded the researcher's recruitment email to all secondary administrators in the southeast region of the United States, explaining the purpose of the research project and informing them permission was granted from the IRB and ACSI. The email requested their participation and asked them to forward the email to their teachers. The email contained instructions and a link to the electronic survey. When the participants received the email, they were instructed that the survey would take approximately 10 minutes of their time. They were asked to click on the survey link in the email message. The link directed them to Survey Monkey, which opened in a new browser. The participants read the instructions and the informed consent form (see Appendix C). Participants understood that by clicking next, they were providing consent to participate in the study. When the survey began, the participants answered five demographic questions (including identify their role as an administrator or teacher) and responded to the 21 r-SLEQ questions. The participants answered each question via a five-point Likert scale, indicating strongly disagree, disagree, neither agree nor disagree, agree, or strongly agree. When all questions were complete, the participants clicked the Complete button. As the surveys were completed, the researcher accessed the data through Survey Monkey and recorded it on an Excel spreadsheet. The data was then entered into SPSS to run descriptive and inferential statistics. Since the number of participating teachers outnumbered the number of participating administrators, the researcher chose the first 50 teacher responses and the first 50 administrator responses to ensure the groups sizes were equal.

## Data Analysis

When the surveys were completed, the researcher organized the data in an excel spreadsheet in preparation to enter the data into SPSS Version 22 for analysis. The data was arranged according to the domains of school climate, as specified in the six null hypotheses. First, the researcher inputted the data into SPSS and checked to assure no mistakes were made in transferring the data. Once the data were entered, descriptive statistics were computed for each group: teachers and administrators. Data screening was conducted regarding data inconsistencies and outliers. The researcher sorted the data and scanned for inconsistencies. Box-and-whisker plots for each group were created to detect extreme outliers. Each outlier was evaluated to determine if it should be removed from the data set before continuing. Multivariate analysis of variance (MANOVA) was used to test the six null hypotheses that look at the domain differences of school climate. MANOVA was the best choice of statistical analysis for this study since there was more than one dependent variable. MANOVA allowed the researcher to test for differences among multiple dependent variables (Gall et al., 2007). The multivariate portion of the analysis was the five domains of climate specified in the r-SLEQe.

MANOVA required several assumptions to be met (Green & Salkind, 2014). The researcher ran a normality test for each group. Normality was examined using a Kolmogorov-Smirnov test since the sample size was greater than 50. Next, the researcher tested for the assumption of multivariate normal distribution by plotting a scatterplot matrix for each group and looking for a linear relationship between each pair of dependent variables. The linear relationship displayed as a classic cigar shape. If the variables had not been linearly related, the power of the test would have been reduced. The researcher then assessed the homogeneity of variance-covariance by using a Box *M* test. MANOVA required that the assumption of the

equality of group dispersions be tested.  $F$  was nonsignificant, so the assumption was satisfied (Gall et al., 2007). Additionally, the researcher checked for the absence of multicollinearity to ensure there was no correlation over .80. Afterwards, the researcher used Wilks' lambda to test the differences between the groups' centroids.  $F$  was significant, so the researcher ran an ANOVA on each dependent variable to discover which mean score was significantly different. The eta squared statistic was used to report the effect size.

## CHAPTER FOUR: FINDINGS

### Overview

Chapter Four presents the results of this study. The purpose of this research is to determine if there are significant differences between teacher and administrator perceptions of school climate in Christian schools. This study compared mean scores of administrators and mean scores of teachers from the r-SLEQ to determine if they demonstrate statistically significant differences in school climate perspectives. In this chapter, the researcher presents the research question, the six hypotheses, the descriptive statistics, and the results of the data analysis.

### Research Question

This study seeks to answer the following research question:

**RQ1:** Is there a difference between teacher and administrator perceptions of school climate in Christian schools?

### Null Hypotheses

The null hypotheses for this study were:

**H<sub>01</sub>:** There is no statistically significant difference between teacher and administrator perceptions of *overall* school climate using the revised School-Level Environment Questionnaire (r-SLEQ).

**H<sub>02</sub>:** There is no statistically significant difference between teacher and administrator perceptions of the *collaboration* domain of school climate using the revised School-Level Environment Questionnaire (r-SLEQ).

**H<sub>03</sub>:** There is no statistically significant difference between teacher and administrator perceptions of the *instructional innovation* domain of school climate using the revised School-

Level Environment Questionnaire (r-SLEQ).

**H<sub>04</sub>:** There is no statistically significant difference between teacher and administrator perceptions of the *decision-making* domain of school climate using the revised School-Level Environment Questionnaire (r-SLEQ).

**H<sub>05</sub>:** There is no statistically significant difference between teacher and administrator perceptions of the *school resources* domain of school climate using the revised School-Level Environment Questionnaire (r-SLEQ).

**H<sub>06</sub>:** There is no statistically significant difference between teacher and administrator perceptions of the *student relations* domain of school climate using the revised School-Level Environment Questionnaire (r-SLEQ).

### **Descriptive Statistics**

The initial request for participants to take the survey (r-SLEQ) was emailed to all Christian school administrators in the southeast region of the United States. The administrators were asked to forward the survey link to their teachers. The survey link was successfully delivered to 239 schools, and 103 responses were received ( $n = 52$  teachers and  $n = 51$  administrators). The survey results from the first 50 administrators and the first 50 teachers were used for analysis. Data obtained for each of the dependent variables can be found in Table 1, including mean scores and standard deviation for each group.

Table 1

*Descriptive Statistics*

Group	Mean	SD
Overall		
Teacher	3.574	0.428
Administrator	3.758	0.392
Collaboration		
Teacher	3.707	0.520
Administrator	3.743	0.535
Instruct. Innovation		
Teacher	3.875	0.625
Administrator	3.950	0.574
Decision Making		
Teacher	2.980	0.704
Administrator	3.520	0.527
School Resources		
Teacher	3.225	0.753
Administrator	3.555	0.793
Student Relations		
Teacher	3.870	0.558
Administrator	3.970	0.433

*Note.* Teachers  $n = 50$ , administrators  $n = 50$ .

## Results

### Data Screening

Data screening was conducted on each group's dependent variables regarding data inconsistencies and outliers. The researcher sorted the data on each variable and scanned for inconsistencies. No data errors or inconsistencies were identified. Box-and-whisker plots were used to detect outliers on each dependent variable. Two extreme outliers in the teacher group were found in the *student relations* data set. Additionally, one extreme outlier was detected in the administrator group in *decision-making*. Each of these three data points were examined, and



it was determined they did not result from data entry errors or measurement errors. For that reason, all were included in the data. See Figure 1 for box-and-whisker plot.

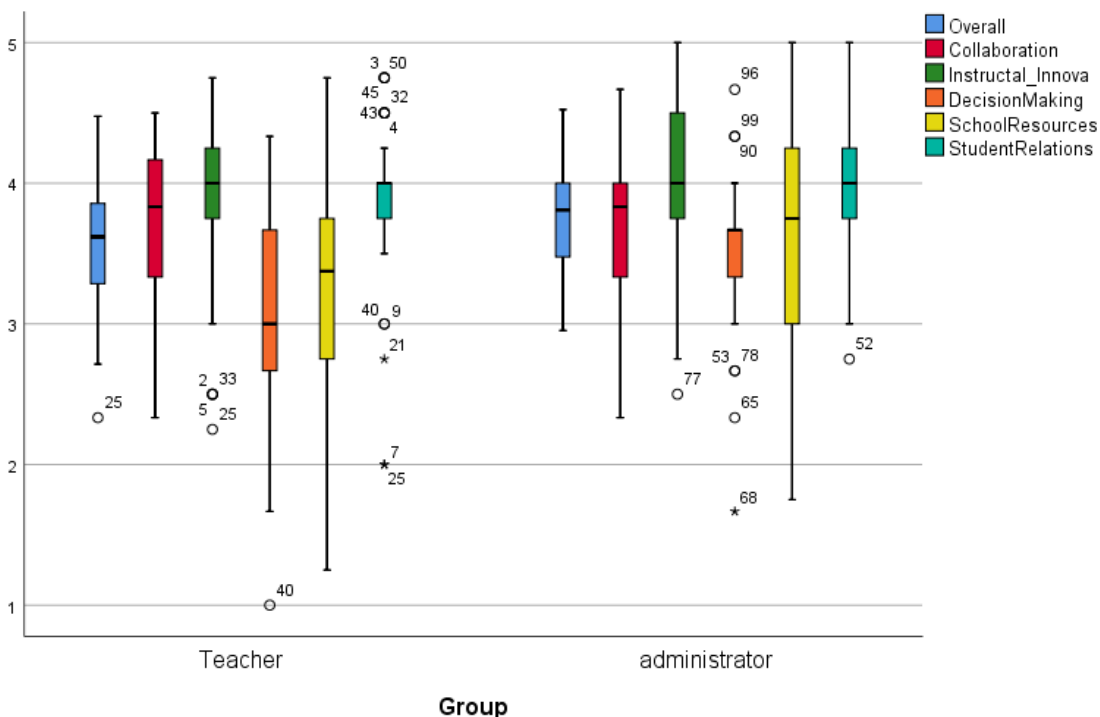


Figure 1. Box-and-whisker plot for all dependent variables for both teacher and administrator.

## Assumption Tests

### Tests of Normality

A one-way MANOVA was used to test the null hypotheses that examined the differences between teacher and administrator perceptions of school climate in Christian schools. The MANOVA required the assumption of normality to be met. Normality was examined using Kolmogorov-Smirnov tests because the group size was 50 or more. Several of the Kolmogorov-Smirnov tests were significant, indicating that the data is not normally distributed in those groups. According to Warner (2013), MANOVA is robust to violations of normality, particularly with groups of equal size as in this study (see Table 2). For that reason, the

researcher continued with the MANOVA analysis. See Table 3 for the Kolmogorov-Smirnov tests.

Table 2

*Between-Subjects Factors*

Group	Value Label	<i>n</i>
.00	Teacher	50
1.00	Administrator	50

Table 3

*Tests of Normality*

Group	Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk		
	Statistic	<i>df</i>	Sig.	Statistic	<i>df</i>	Sig.
Overall						
Teacher	0.09	50	0.200*	0.971	50	0.263
Administrator	0.112	50	0.156	0.975	50	0.356
Collaboration						
Teacher	0.154	50	0.005	0.940	50	0.013
Administrator	0.107	50	0.200*	0.973	50	0.318
Instruct. innovation						
Teacher	0.181	50	0.000	0.922	50	0.003
Administrator	0.164	50	0.002	0.957	50	0.064
Decision making						
Teacher	0.148	50	0.008	0.957	50	0.068
Administrator	0.23	50	0.000	0.911	50	0.001
School resources						
Teacher	0.143	50	0.013	0.974	50	0.322
Administrator	0.117	50	0.084	0.960	50	0.090
Student relations						
Teacher	0.252	50	0.000	0.820	50	0.000
Administrator	0.192	50	0.000	0.939	50	0.013

\*This is a lower bound of the true significance.

<sup>a</sup>Lilliefors significance correction

### Assumption of Multivariate Normal Distribution

The assumption of multivariate normal distribution was examined using scatterplots. The researcher tested for this assumption by plotting a scatterplot matrix for each group of the independent variables. The classic cigar shape was evident. There was a linear relationship between each of the six dependent variables for both the teacher group and the administrator group. Therefore, the assumption of multivariate normal distribution was tenable. See Figures 2 and 3 for the scatterplot matrix for each group.

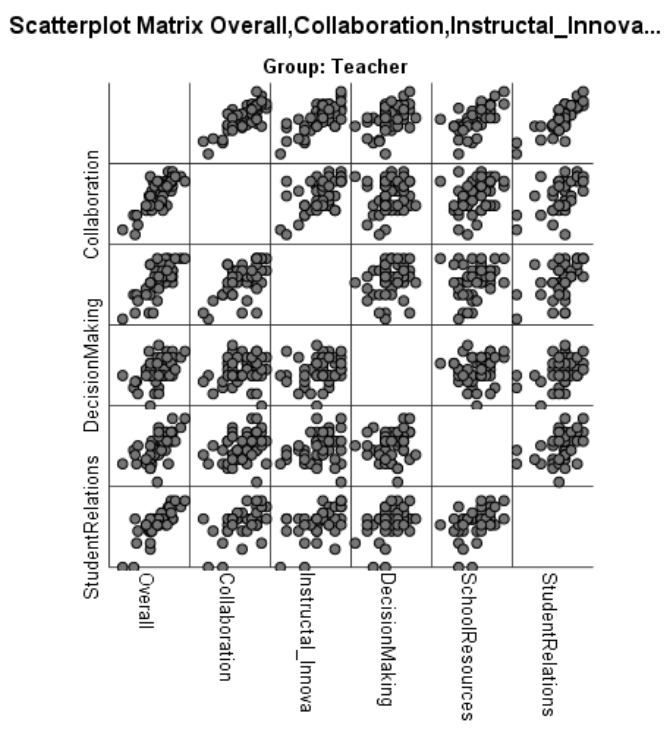
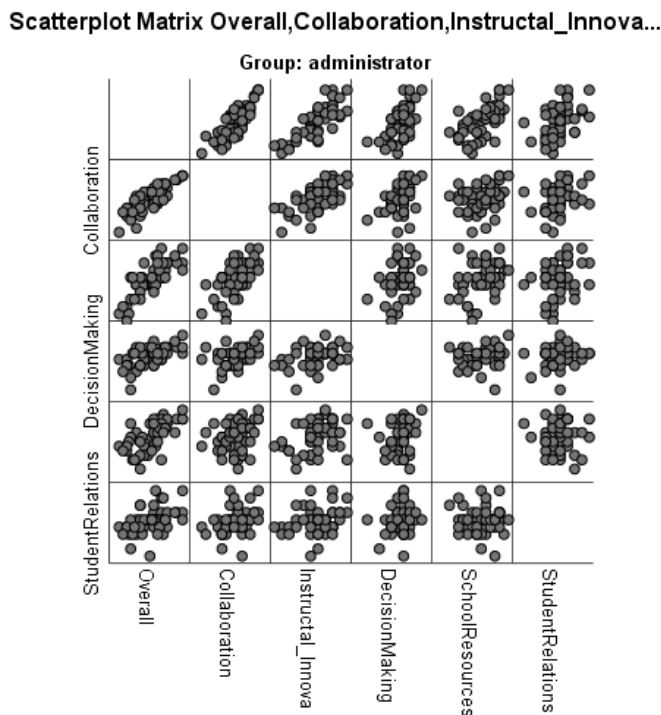


Figure 2. Scatterplot depicting a linear relationship between the teacher group and each dependent variable.



*Figure 3.* Scatterplot depicting a linear relationship between the administrator group and each dependent variable.

### **Assumption of Homogeneity of Variance-Covariance Matrices**

An additional assumption of the one-way MANOVA is that there must be similar variances and covariances. This assumption was tested in SPSS using Box's M test of equality of covariance. Box's M tests the null hypotheses that the observed covariance matrices of the dependent variables are equal across groups. There was homogeneity of variance-covariances matrices, as assessed by Box's test of equality of covariance matrices ( $p = .155$ ). Therefore the assumption of homogeneity of variance-covariances is tenable. See Table 4.

Table 4

*Box's Test of Equality of Covariance Matrices*

Box's M	29.436
F	1.31
df1	21
df2	35323.496
Sig.	0.155

**Absence of Multicollinearity**

The dependent variables should all be moderately related, but any correlation over .80 presents a concern for multicollinearity. For each pair of dependent variables, the value of Pearson's  $r$  was less than .80. Therefore, the assumption of multicollinearity is tenable. The r-SLEQ has been used in numerous peer-reviewed studies and has high reliability and internal consistency. The survey questions are not too highly correlated. See Table 5 for the correlations.

Table 5

*Pearson Correlations*

	Collab.	Instructional Innovation	Decision Making	School Resources	Student Relations
Overall	.788**	.742**	.565**	.664**	.647**
Collaboration		.572**	.280**	.314**	.424**
Instructional Innovation			.271**	.312**	.399**
Decision Making				.241*	.327**
School Resources					.234*

Note.  $N = 100$ .

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

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

### Results for Null Hypotheses 1–6

It was hypothesized that teachers and administrators' perceptions of school climate would not differ significantly overall or in the five specific domains of collaboration, instructional innovation, decision-making, school resources, and student relations. A MANOVA was conducted to test these six hypotheses. As shown in Table 6, Wilks' Lambda reveals there was a statistically significant difference between the administrators and teachers on the combined dependent variables,  $F(5, 94) = 4.391, p < .001$ , Wilks'  $\Lambda = .811$ , partial  $\eta^2 = .189$ , power .959. Therefore, the researcher rejected the null hypothesis that there are no differences between the groups, with a medium effect size.

Table 6

*Wilks' Lambda*

Value	F	Hypothesis <i>df</i>	Error <i>df</i>	Sig.	Partial Eta Squared	Noncent. Parameter	Observed Power <sup>c</sup>
0.811	4.391 <sup>b</sup>	5	94	0.001	0.189	21.956	0.959

To determine which dependent variable was contributing to the statistically significant MANOVA, the researcher inspected the one-way ANOVA result for each dependent variable. These results are contained within Table 7. There was a statistically significant difference in the *overall* scores between the administrators and teachers,  $F(1, 98) = 5.018, p < .027$ , partial  $\eta^2 = .049$ . The effect size was small. Therefore, null hypothesis one was rejected. For the collaboration domain, the difference in teachers and administrators' perceptions was not significant where  $F(1, 98) = 0.121, p = .729$ . Therefore, the researcher failed to reject null hypothesis two. Instructional innovation scores did not differ significantly where  $F(1, 98) = .391, p = .533$ . Therefore, the researcher failed to reject null hypothesis three. However, there

was a statistically significant difference in the *decision-making* scores between the administrators and teachers,  $F(1, 98) = 18.848, p < .0005$ , partial  $\eta^2 = .161$  (a large effect size). Therefore, the fourth null hypothesis was rejected. Also, there was a statistically significant difference in the *school resources* scores between the administrators and teachers,  $F(1, 98) = 4.556, p < .0005$ , partial  $\eta^2 = .044$  (small effect size). Therefore, the fifth null hypothesis was rejected. For the student relations variable, no significant differences were present  $F(1, 98) = 1.001, p = .320$ . Therefore, the researcher failed to reject null hypothesis six.

Table 7

*ANOVA Results for Each Dependent Variable (n = 50)*

Variables	<i>df</i>	<i>MS</i>	<i>F</i>	Sig.	Partial $\eta^2$
Overall	1.000	0.845	5.018	0.027	0.049
Error	98.000	0.168	5.018	0.027	0.049
Collaboration	1.000	0.034	0.121	0.729	0.001
Error	98.000	0.278	0.121	0.729	0.001
Instructional Innovation	1.000	0.141	0.391	0.533	0.004
Error	98.000	0.360	0.391	0.533	0.004
Decision Making	1.000	7.290	18.848	0.000	0.161
Error	98.000	0.387	18.848	0.000	0.161
School Resources	1.000	2.723	4.556	0.035	0.044
Error	98.000	0.598	4.556	0.035	0.044
Student Relations	1.000	0.250	1.001	0.320	0.010
Error	98.000	0.250	1.001	0.320	0.010

## CHAPTER FIVE: CONCLUSIONS

### Overview

The current body of literature regarding school climate reveals significant positive student outcomes related to a healthy school climate. Although studies have been conducted on various stakeholder perceptions of school climate, there is a lack of research focused on perceptual differences between school leaders and teachers. It is important to evaluate stakeholder differences, as principals are tasked with forming the climate of the school and teachers are responsible for relaying that climate to students. Moreover, there is a lack of school climate studies conducted in Christian schools. Christian school leaders need school climate data to help sustain and improve Christian education. This study seeks to provide empirical data that will aid in the success of Christian education. This chapter presents the conclusion of this study and discusses the study's research question in light of its results. The researcher compares the results of the present study with findings from earlier studies. This chapter also presents valuable implications for Christian schools and recommendations that will aid in the success and sustainment of Christian education. The researcher then examines the limitations of the study, citing any threats to the study's validity. To conclude the chapter, recommendations for future studies are suggested.

### Discussion

The purpose of this study is to determine if there are significant differences between teacher and administrator perceptions of school climate in Christian schools. A sample of Christian school teachers ( $n = 50$ ) and administrators ( $n = 50$ ) from the southeast region of the United States completed the r-SLEQ. From their responses, the researcher compared mean scores of administrators and mean scores of teachers to determine if they demonstrate



statistically significant differences in school climate perspectives. The data were analyzed using a MANOVA statistical analysis, which produced three significant findings. This study presented one research question which asked: Is there a difference between teacher and administrator perceptions of school climate in Christian schools? The results are presented according to each of the null hypotheses.

### **Null Hypothesis 1**

Null hypothesis one purports there is no significant difference between teacher and administrator perceptions of *overall* school climate using the r-SLEQ. The results of this study reject the null hypothesis, revealing there is a significant difference between teachers ( $M = 3.5743$ ) and administrators' ( $M = 3.7581$ ) perceptions of overall school climate. This result is consistent with current literature that has revealed significant differences in climate perspectives between teachers and non-teaching staff (Kumar, 2015). Although few researchers have previously explored the relationship between the perspectives of more than one stakeholder (Maxwell et al., 2017; Price & Moolenaar, 2015), the significant difference in the overall climate in this study is likely due to the significant findings from the sub-domains of decision-making and school resources, which are explained hereafter.

These results are supported by the attraction-selection-attrition theory (Schneider, 1987). This theory explains that employees choose to work for a business because they are attracted to the culture (Zhao & Wu, 2014). Additionally, organizations select employees who share similar values and are compatible with the organization's goals. Through attraction and selection, people within an organization hold similar viewpoints and beliefs. Thereby, the climate is established when the people within it transmit their shared values. A healthy climate cannot be established when its stakeholders have opposing values and perceptions. Therefore, attrition

occurs when a person no longer fits within the organization's culture, and they leave. Successful school climates are created when the people in the organization know the climate well. It is vital for Christian school administrators to understand their school climate, identify differences that may exist among its stakeholders, and resolve these differences in order to create a successful school climate that attracts students and staff.

### **Null Hypothesis 2**

The second null hypothesis indicates there is no significant difference between teacher and administrator perceptions of the *collaboration* domain of school climate using the revised r-SLEQ. The results of this study reveal there is indeed no significant difference. Furthermore, there is very minimal variance between the teachers ( $M = 3.7067$ ) and administrators' ( $M = 3.7433$ ) perceptions of collaboration. This result supports current literature on teacher collaboration. Teacher collaboration has become the norm in education (Vangrieken, Dochy, Raes, & Kyndt, 2015). There is a large body of literature on the positive educational outcomes of collaboration (Goddard, Goddard, Kim, & Miller, 2015; Reeves, Pun, & Chung, 2017). Therefore, policymakers have successfully implemented Professional Learning Communities across the nation (Ronfeldt, Farmer, McQueen, & Grissom, 2015). Teachers coordinate classroom instruction and cooperate well with their colleagues (Wang & Degol, 2016). When teachers feel supported by their colleagues and principal, they stay in the career of teaching longer (Fulton et al., 2005; Singh & Billingsley, 1998) and they impact student learning (Guo & Higgins-D'Alessandro, 2011; Hoy & Woolfolk, 1993). Collaborative partnership among school staff prevents teachers from burning out (Aldridge & Fraser, 2016; Grayson & Alvarez, 2008; Higgins-D'Alessandro, 2002). Moreover, a study conducted by Park and Ham (2016) concluded

that teachers collaborate more effectively when teacher and administrator perceptions are in agreement.

In regard to theory, these results are supported by Mezirow's transformative learning theory. Transformative learning teaches people to be reflective thinkers and good communicators. When people learn from their problems, they can experience a shift in thinking and learn from their past experiences (Calleja, 2014). For educators, this transformation occurs when they recognize the hidden influences in their lives (Calleja, 2014). When educators allow themselves to be open to other points-of-view and accept new information, they are engaged in transformative learning (Mezirow, 1998a). Mezirow's transformative learning theory emphasizes the value of communication and interaction with colleagues. Validating the importance of what people say is important for healthy communication (Calleja, 2014). Mezirow recognized that transformation can occur through the interpretation of communication, a process that involves reflection and insight (Mezirow, 1998b). When educators collaborate, they can experience transformative learning.

### **Null Hypothesis 3**

Null hypothesis three indicates there is no significant difference between teacher and administrator perceptions of the *instructional innovation* domain of school climate using the revised r-SLEQ. The results of this study reveal there is no significant difference between teachers ( $M = 3.875$ ) and administrators' ( $M = 3.95$ ) perceptions regarding instructional innovation. The instructional innovation domain of school climate refers to teaching and learning, leadership, and professional development (Wang & Degol, 2016). Innovation encompasses introducing new teaching methods and changing practices to meet the students' needs (Zhu & Engels, 2014). The result of this study is consistent with current literature on

innovation. Research demonstrates that teachers are more innovative when the innovation emerges from collaboration (Holdsworth & Maynes, 2017). Since the results of this study demonstrate high assonance in teacher and administrator perceptions of collaboration, it would be expected to see similar results in the innovation domain. Administrators understand the impact innovative teaching strategies have on student achievement (Goddard & Kim, 2018). Therefore, the level of school leaders' support of innovative efforts, such as professional development opportunities and coaching, directly affects the teachers' decision to pursue new methods (Holdsworth & Maynes, 2017). Through evidence-based research, educators understand high quality instruction produces greater student outcomes (Mitchell & Sackney, 2016).

Relating to theory, the instructional innovation results are supported by Mezirow's transformative learning theory. Mezirow's transformative learning theory helps educators change their beliefs and practices by teaching them to reflect on the effectiveness of their current perspectives. When teachers accept new information, they are engaged in transformative learning (Mezirow, 1998). During this transformation, teachers will explore new options, acquire new knowledge, practice their new roles, and gain competence in the innovation.

#### **Null Hypothesis 4**

The fourth null hypothesis declares there is no significant difference between teacher and administrator perceptions of the *decision-making* domain of school climate using the revised r-SLEQ. The results of this study rejected this null hypothesis. There is a significant difference in teachers' perceptions ( $M = 2.98$ ) and administrators' perceptions ( $M = 3.52$ ) regarding how decisions are made in Christian schools. There is a significant variance between the groups, with a large effect size,  $\eta^2 = .161$ .

Decision-making refers to the extent teachers' input influences the school operations or if school leaders make all the decisions. The results of this study are consistent with the body of literature on decision-making. Sarafidou and Chatziioannidis (2013) found that teachers believed they did not get opportunities to participate in management decisions, even though they desired an input. Moreover, previous research agrees that principals perceive a greater level of teacher input in decision-making than the teachers report (Noel, Slate, Brown, & Tejada-Delgado, 2009). However, empirical evidence reveals teachers feel trusted and supported when they are asked to collaboratively participate in decision-making. Shared decision-making directly affects school climate. Collaborative leadership results in improved school outcomes (Heck & Hallingar, 2010). To promote a climate of justice and support, teachers' ideas need to be a part of the decisions that are made (Burns & DiPaola, 2013; Malloy et al., 2015; Price & Moolenaar, 2015).

Relating to theory, Mezirow's transformative learning theory can assist school leaders in recognizing and reconciling the differences that exist in decision-making practices. When people realize their beliefs are flawed, they seek to change them (Christie et al., 2015). Transformative learning theory helps people understand how to challenge their previously held beliefs, be open to other points-of-view, and work toward establishing new thoughts and behaviors (Mezirow, 1998a).

### **Null Hypothesis 5**

Null hypothesis five stated there is no significant difference between teacher and administrator perceptions of the *school resources* domain of school climate using the r-SLEQ. Therefore, this hypothesis was rejected. The results of this study reveal there is a significant difference between teachers' perceptions ( $M = 3.225$ ) and administrators' perceptions ( $M =$

3.555) regarding the availability of school resources, with a small effect size ( $\eta^2 = .044$ ).

Teachers perceive a less availability of resources than administrators. According to the r-SLEQ, school resources refer to the adequacy of educational equipment such as technology, books, internet, and supplies.

The results of this study are congruent with current literature that examines teacher perspectives of school climate. Since teachers experience the school environment daily in direct contact with school resources, they report lower perceptions of academic factors, such as availability of resources, than other stakeholders (Ramsey et al., 2016). Current literature on school resources emphasizes the relationship between school resources and school success. The lack of resources and supplies can lead to negative teacher efficacy and a negative overall school climate. When students and teachers have access to adequate resources, the school climate is positive (Miles & Darling-Hammond, 1998). School resources also influence students' academic performance (Greenwald et al., 1996; Ramsey et al., 2016). Research shows that students with access to adequate resources score higher than students who do not have available support resources (Han & Bridglall, 2009). The amount of money a school spends on resources is related to student performance (Della Sala et al., 2017).

These results are supported by Mezirow's transformative learning theory. More than ever before, school leaders must be able to adapt to rapidly changing norms and situations within their schools. Through transformative learning theory, administrators can analyze their beliefs about resource allocation, recognize where improvements are needed, and take action to make the changes necessary to maximize the potential of their resources. Administrators and teachers need to be aware of the quickly changing resource needs, such as technology and educational equipment. With the advancement of technology, school leaders cannot hold on to previously

held beliefs concerning the allocation of resources. Transformative learning, through professional development, is one avenue to aid school leaders in modernizing their ideals in an effort to support school climate improvements (Meijer et al., 2017).

### **Null Hypothesis 6**

There is no significant difference between teacher and administrator perceptions of the *student relations* domain of school climate using the revised r-SLEQ. The results of this study reveal there is no significant difference between the groups regarding student relations. Teachers ( $M = 3.87$ ) and administrators ( $M = 3.97$ ) agree on the factors related to student behavior, student motivation, and student cooperation.

This result supports current literature on climate perspectives. For school climate factors involving student relations, the dissimilarity of perspectives was reported more from students and not staff. Staff tend to agree on issues such as discipline and student cooperation. Staff perceptions of student behavior differ significantly from students' perceptions (Ramsey et al., 2016).

Attraction-selection-attrition theory sheds light on these results. The homogeneity of administrator and teacher perspectives can be rationalized by this theory because people choose to work in an environment where they hold similar values and beliefs (Zhao & Wu, 2014). Teachers are attracted to an organization because of its personal characteristics, such as student relations.

### **Implications**

The results of this study provide substantial knowledge that will help improve Christian education. School climate is one of the most important indicators of a school's success (McCarley et al., 2016). This study was driven by the researcher's desire to provide data that

will improve and sustain Christian education. Schools cannot be successful when its stakeholders have incongruent beliefs and attitudes (MacNeil et al., 2009). Perceptual differences among administrators and teachers should be reconciled for a school to accomplish its mission. Christian schools nationwide are experiencing a decline in enrollment and an increase in school closures since 2006 (ACSI, 2017). School climate perceptions are important to study because the future of Christian education is at stake. This study provides valuable evidence to assist school leaders in best practices to keep Christian schools flourishing and avoiding closure.

Through empirical data, this study reveals the specific areas in which Christian school educators should focus their attention in order to improve their school climate. Moreover, the study confirms the domains of climate that are not in discord and should not be the emphasis of improvement efforts. Overall, administrators and teachers in Christian schools in the southeast region of the United States hold significant dissimilar beliefs about their overall school climate, decision-making within their schools, and the availability of school resources. The researcher suggests that school leaders increase their efforts to create an environment of shared decision-making. Research shows that leaders who are collegial and transformative are more successful at implementing shared decision-making (Tschannen-Moran & Gareis, 2015). Administrators who are not adept in shared leadership could benefit from professional development on leadership practices and philosophies that incorporate a more collaborative approach to making decisions. To improve Christian education, teachers need to feel their suggestions are heard and implemented into school policies or improvement efforts.

The lack of educational resources will always be a need in education. However, there does not have to be a discrepancy between administrators and teachers about the availability and



distribution of the resources. School leaders need to communicate effectively with their stakeholders and involve them in the discussions regarding the school's resource needs. Through a shared understanding, school leaders and teachers can effectively manage their resources and maximize their potential.

Once school leaders close the gap in perceptions of how decisions are made and how resources are distributed, the perceptions of the overall school climate will begin to correspond. Once the suggestions from this study are implemented, the work environment will improve as discord among school leaders and teachers is resolved. Christian schools will become more successful, and according to attraction-selection-attrition theory, teacher attrition will decrease as teachers remain satisfied with the environment they were first attracted to.

### **Limitations**

Internal threats to validity in this study were limited because the participants remained anonymous and the data was secure. By participating in this study, participants did not encounter risks greater than those of their normal daily life. To minimize risks and ensure there were no violations of privacy, legal risks, or psychosocial stress, the researcher eliminated all unnecessary procedures and collected the minimum data needed. The researcher only saw the participants' answers to the surveys, and no identifying information was requested. To further protect the privacy of the participants, the records of this study were kept private. Data were stored on a password locked computer. Only the researcher and the dissertation chair have access to the data. The surveys were administered through Survey Monkey, and no identifying information was requested. The research department of ACSI directly contacted the participants, and the researcher did not have access to any participant contact information. Additionally, the participants were not compensated.

However, the researcher identifies limitations with this study. There are shortcomings with causal-comparative research. Causal-comparative designs can only establish a relationship between the variables. Since this design is not experimental, the researcher has no control over the variables and cannot prove that the independent variable actually caused the change in the outcome (Gall et al., 2007).

Also, in causal-comparative research, the groups are already established and not randomly selected, which weakens the generalizability (Salkind, 2010). Additionally, the researcher sampled a specific population, restricted to only ACSI accredited high schools in the southeastern region of the United States. The findings of this study should only be applied to this specific population. It is reasonable to expect the findings of this study to be congruent with similar populations. However, the researcher cautions that the generalizability is limited, as the results are specific to ACSI high schools in the southeast region of the United States.

The low response rate to the survey presents another limitation. The minimum participant population required for this study was  $N = 100$ . The survey only produced 103 responses to the survey instrument (r-SLEQ). The low response rate was because the survey was distributed during the summer months when teachers were not at school and were not regularly checking their school emails. The low response rate to the surveys was due to the timing of the request.

Lastly, the researcher recognizes the survey instrument (r-SLEQ) employs a Likert scale that may not fully represent the teachers and administrators' perceptions. Likert scales measure the degree to which the participants agree or disagree with the questions on a scale from one to five. The researcher acknowledges that a person's perspective cannot be fully encompassed

from this limited range. However, the r-SLEQ is a valid instrument with high reliability and internal consistency (Johnson et al., 2007).

### **Recommendations for Future Research**

1. This study should be repeated to increase its generalizability. The researcher recommends for this study to be repeated in Christian schools in additional regions across the United States.
2. This study should be repeated to incorporate the perspectives of elementary and middle school educators in Christian schools across the United States.
3. This study should also be repeated under additional theoretical constructs to provide more understanding of the dissonance between educators' perspectives.
4. A similar study should be conducted that investigates the reasons administrators lack in shared decision-making.

## REFERENCES

- Association of Christian Schools International. (2017). *US EE-12 (10 Year) Members stats*. Membership Services Data. Colorado Springs, CO: Association of Christian Schools International. Sciences Collection.
- Association of Christian Schools International. (2018a). *Mission and vision*. Retrieved from <https://www.acsi.org/membership/acsi-overview/mission-and-vision>
- Association of Christian Schools International. (2018b, March 11). Southeast accreditation. Retrieved from <https://www.acsi.org/region/southeast/accreditation>
- Association of Christian Schools International. (2018c, March 11). *2013–14 school survey*. Retrieved from <https://www.acsi.org/legal-legislative-pages/tuition-salary-and-benefits-survey/acsi-2013–14-school-survey>
- Akiba, M. (2010). What predicts fear of school violence among US adolescents? *The Teachers College Record*, *112*, 68–102.
- Aldridge, J., & Fraser, B. (2016). Teachers' views of their school climate and its relationship with teacher self-efficacy and job satisfaction. *Learning Environments Research*, *19*(2), 291–307. doi:10.1007/s10984-015-9198-x
- Aldridge, J., & Fraser, B. (2018). Teachers' perceptions of the organizational climate: A tool for promoting instructional improvement. *School Leadership & Management*, *38*(3), 323–344. doi:10.1080/13632434.2017.1411899
- Aldridge, J., Fraser, B., Fozdar, F., Ala'i, K., Earnest, J., & Afari, E. (2016). Students' perceptions of school climate as determinants of wellbeing, resilience and identity. *Improving Schools*, *19*(1), 5–26. doi:10.1177/1365480215612616
- Alston, C. R. (2017). *A causal comparative study of teacher and administrator perceptions of*

- school climate within elementary schools in a district* (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses Global. (Order No. 10256900)
- Attar-Schwartz, S. (2009). Peer sexual harassment victimization at school: The roles of student characteristics, cultural affiliation, and school factors. *American Journal of Orthopsychiatry*, 79, 407–420. doi:10.1037/a0016553
- Back, L. T., Polk, E., Keys, C. B., & McMahon, S. D. (2016). Classroom management, school staff relations, school climate, and academic achievement: Testing a model with urban high schools. *Learning Environments Research*, 19(3), 397–410. doi:10.1007/s10984-016-9213-x
- Baker, B. D. (2012). *Revisiting that age-old question: Does money matter in education?* Retrieved from [http://www.shankerinstitute.org/sites/shanker/files/moneymatters\\_edition2.pdf](http://www.shankerinstitute.org/sites/shanker/files/moneymatters_edition2.pdf)
- Basak, R. (2016). School environment and career stages of school teachers: An empirical study. *International Journal of Education and Management Studies*, 6(4), 473.
- Bear, G. G., Yang, C., & Pasipanodya, E. (2015). Assessing school climate: Validation of a brief measure of the perceptions of parents. *Journal of Psychoeducational Assessment*, 33(2), 115–129. doi:10.1177/0734282914545748
- Bear, G. G., Yang, C., Pell, M., & Gaskins, C. (2014). Validation of a brief measure of teachers' perceptions of school climate: Relations to student achievement and suspensions. *Learning Environments Research*, 17(3), 339–354. doi:10.1007/s10984-014-9162-1
- Bellibas, M. S., & Liu, Y. (2018). The effects of principals' perceived instructional and distributed leadership practices on their perceptions of school climate. *International*

*Journal of Leadership in Education*, 21(2), 226–244.

doi:10.1080/13603124.2016.1147608

Benbenishty, R., Astor, R., Roziner, I., & Wrabel, S., (2016). Testing the casual links between school climate, school violence, and school academic performance. A cross-lagged panel autoregressive model. *Educational Researcher*, 45(3), 197–206.

doi:10.3102/0013189X16644603

Berg, J. K., & Aber, J. L. (2015). A multilevel view of predictors of children’s perceptions of school interpersonal climate. *Journal of Educational Psychology*, 107(4), 1150.

doi:10.1037/edu0000027

Berkowitz, R., Astor, R. A., Pineda, D., DePedro, K. T., Weiss, E. L., & Benbenishty, R. (2017). Parental involvement and perceptions of school climate in California. *Urban Education*.

doi:10.1177/0042085916685764

Berkowitz, R., Glickman, H., Benbenishty, R., Ben-Artzi, E., Raz, T., Lipshtat, N., & Astor, R. A. (2015). Compensating, mediating, and moderating effects of school climate on academic achievement gaps in Israel. *Teachers College Record*, 117(7), 1.

Berkowitz, R., Moore, H., Astor, R., & Benbenishty, R. (2017). A research synthesis of the associations between socioeconomic background, inequality, school climate, and academic achievement. *Review of Educational Research*, 87(2), 425–469.

doi:10.3102/0034654316669821

Blaya, C. (2006). *Harassment and abuse in school environment*. Paris, France: Armand Colin.

Bosworth, K., & Judkins, M. (2014). Tapping into the power of school climate to prevent bullying: One application of schoolwide positive behavior interventions and supports.

*Theory into Practice*, 53(4), 300–307. doi:10.1080/00405841.2014.947224

- Bradshaw, C. P., Koth, C. W., Thornton, L. A., & Leaf, P. J. (2009). Altering school climate through school-wide positive behavioral interventions and supports: Findings from a group-randomized effectiveness trial. *Prevention Science, 10*(2), 100–115.  
doi:10.1007/s11121-008-0114-9
- Bradshaw, C. P., Waasdorp, T. E., Debnam, K. J., & Johnson, S. L. (2014). Measuring school climate in high schools: A focus on safety, engagement, and the environment. *Journal of School Health, 84*(9), 593–604. doi:10.1111/josh.12186
- Bronfenbrenner, U. (1979). Contexts of child rearing: Problems and prospects. *American Psychologist, 34*, 844–850. doi:10.1037/0003-066X.34.10.844
- Bryk, A. S., Sebring, P. B., Allensworth, E., Luppescu, S., & Easton, J. Q. (2010). *Organizing schools for improvement: Lessons from Chicago*. Chicago, IL: University of Chicago Press.
- Burdick-Will, J. (2013). School violent crime and academic achievement in Chicago. *Sociology of Education, 86*(4), 343–361. doi:10.1177/0038040713494225
- Burkhauser, S. (2017). How much do school principals matter when it comes to teacher working conditions? *Educational Evaluation and Policy Analysis, 39*(1), 126–145.  
doi:10.3102/0162373716668028
- Burns, W. R. T., & DiPaola, M. F. (2013). A study of organizational justice, organizational citizenship behavior, and student achievement in high schools. *American Secondary Education, 42*(1), 4–23. Retrieved from <https://www.jstor.org/journal/amersecedu>
- Cairns, L. G. (1987). Behavior problems. In M. J. Dunkin (Ed.), *International encyclopedia of teaching and teacher education* (pp. 446–452). New York, NY: Pergamon.

- Calleja, C. (2014). Jack Mezirow's conceptualisation of adult transformative learning: A review. *Journal of Adult and Continuing Education, 20*(1), 117–136. doi:10.7227/JACE.20.1.8
- Castro, M., Expósito-Casas, E., López-Martín, E., Lizasoain, L., Navarro-Asencio, E., & Gaviria, J. L. (2015). Parental involvement on student academic achievement: A meta-analysis. *Educational Research Review, 14*, 33–46. doi:10.1016/j.edurev.2015.01.002
- Centers for Disease Control and Prevention. (2009). *School connectedness: Strategies for increasing protective factors among youth*. Retrieved from <http://www.cdc.gov/HealthyYouth/AdolescentHealth/pdf/connectedness.pdf>
- Checkoway, B., & Aldana, A. (2013). Four forms of youth civic engagement for diverse democracy. *Children and Youth Services Review, 35*(11), 1894–1899. doi:10.1016/j.chilyouth.2013.09.005
- Christie, M., Carey, M., Robertson, A., & Grainger, P. (2015). Putting transformative learning theory into practice. *Australian Journal of Adult Learning, 55*(1), 9–30. Retrieved from <https://www.ajal.net.au/>
- Cleveland, R. E., & Sink, C. A. (2017). Student happiness, school climate, and school improvement plans: Implications for school counseling practice. *Professional School Counseling, 21*(1). doi:10.1177/2156759X18761898
- Cohen, J. (2014a). The foundation for democracy: School climate reform and prosocial education. *Journal of Character Education, 10*(1), 43.
- Cohen, J. (2014b). Mental health clinicians and educators learning together: School climate reform and the promotion of effective K-12 risk prevention/health promotion efforts. *Journal of Infant, Child, and Adolescent Psychotherapy, 13*(4), 342–349. doi:10.1080/15289168.2014.951273



- Cohen, J., McCabe, L., Michelli, N., & Pickeral, T. (2009). School climate: Research, policy, practice, and teacher evaluation. *Teachers College Record, 111*(1), 180–213.
- Collie, R. J., Shapka, J. D., & Perry, N. E. (2012). School climate and social-emotional learning: Predicting teacher stress, job satisfaction, and teaching efficacy. *Journal of Educational Psychology, 104*, 1189–1204. doi:10.1037/a0029356
- Cornell, D., & Bradshaw, C. (2015). From a culture of bullying to a climate of support: The evolution of bullying prevention and research. *School Psychology Review, 44*(4), 499.
- Cornell, D., Shukla, K., & Konold, T. R. (2016). Authoritative school climate and student academic engagement, grades, and aspirations in middle and high schools. *AERA Open, 2*(2). doi:10.1177/2332858416633184
- Dawson, C., & Parker, J. R. (1998, November). *A descriptive analysis of the perspective of Neville High School teachers regarding the school renovation*. Paper presented at the meeting of the Mid-South Educational Research Association, New Orleans, LA.
- DeJung, J., & Duckworth, K. (1986). *High school teachers and their students' attendance: Final report*. Eugene, OR: University of Oregon Center for Education Policy and Management, College of Education. Retrieved from <https://files.eric.ed.gov/fulltext/ED266557.pdf>
- Della Sala, M. R., Knoepfel, R. C., & Marion, R. (2017). Modeling the effects of educational resources on student achievement: Implications for resource allocation policies. *Education and Urban Society, 49*(2), 180–202. doi:10.1177/0013124516643757
- Dewey, J. (1916). *Democracy and education. An introduction to the philosophy of education*. New York, NY: Free Press.
- Doumas, D., Midgett, A., & Johnston, A. (2017). Substance use and bullying victimization among middle and high school students: Is positive school climate a protective factor?

- Journal of Addictions and Offender Counseling*, 38(1), 2–15. doi:10.1002/jaoc.12025
- Duff, B. K. (2013). *Differences in assessments of organizational school climate between teachers and administrators* (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses Global. (Order No. 3559002)
- Durkheim, E. (1961). *Moral education: A study in the theory and application of the sociology of education*. New York, NY: Free Press.
- Elsaesser, C., Gorman-Smith, D., & Henry, D. (2013). The role of the school environment in relational aggression and victimization. *Journal of Youth and Adolescence*, 42, 235–249.
- Espelage, D. L., Low, S. K., & Jimerson, S. R. (2014). Understanding school climate, aggression, peer victimization, and bully perpetration: Contemporary science, practice, and policy. *School Psychology Quarterly*, 29, 233–237. doi:10.1037/spq0000090
- Ewert, S. (2013). *The decline in private school enrollment*. Retrieved from [https://www.census.gov/library/working-papers/2013/acs/2013\\_Ewert\\_01.html](https://www.census.gov/library/working-papers/2013/acs/2013_Ewert_01.html)
- Fan, W., Williams, C. M., & Corkin, D. M. (2011). A multilevel analysis of student perceptions of school climate: The effect of social and academic risk factors. *Psychology in the Schools*, 48, 632–647. doi:10.1002/pits.20579
- Finn, J. D., & Achilles, C. M. (1999). Tennessee's class size study: Findings, implications, and misconceptions. *Educational Evaluation and Policy Analysis*, 21(2), 97–110. doi:10.3102/01623737021002097
- Finnan, C., Schnepel, K., & Anderson, L. (2003). Powerful learning environments: The critical link between school and classroom cultures. *Journal of Education for Students Placed at Risk*, 8, 391–418. doi:10.1207/S15327671ESPR0804\_2

- Fisher, B. W., Viano, S., Curran, F. C., Pearman, F. A., & Gardella, J. H. (2018). Students' feelings of safety, exposure to violence and victimization, and authoritative school climate. *American Journal of Criminal Justice, 43*(1), 6–25. doi:10.1007/s12103-017-9406-6
- Fosnacht, K., & Broderick, C. (2018). The role of religion and institution type in seniors' perceptions of the religious and spiritual campus climate. *Journal of College and Character, 19*(1), 18. doi:10.1080/2194587X.2017.1411274
- Freiberg, H. J., & Stein, T. A. (1999). Measuring, improving and sustaining healthy learning environments. In H. J. Freiberg (Ed.), *School climate: Measuring, improving and sustaining healthy learning environments* (pp. 11–29). Philadelphia, PA: Falmer Press.
- Fulton, I., Yoon, I., & Lee, C. (2005). *Induction into learning communities*. Washington, DC: National Commission on Teaching and America's Future.
- Gage, N. A., Larson, A., Sugai, G., & Chafouleas, S. M. (2016). Student perceptions of school climate as predictors of office discipline referrals. *American Educational Research Journal, 53*(3), 492–515. doi:10.3102/0002831216637349
- Gall, J. P., Gall, M. D., & Borg, W. R. (2007). *Educational research: An introduction* (8th ed.). New York, NY: Longman.
- Gerlinger, J., & Wo, J. C. (2014). Preventing school bullying: Should schools prioritize an authoritative school discipline approach over security measures? *Journal of School Violence, 15*, 133–157. doi:10.1080/15388220.2014.956321
- Ghaith, G. (2003). The relationship between forms of instruction, achievement and perceptions of classroom climate. *Educational Research, 45*, 83–93. doi:10.1080/0013188032000086145

- Ghavifekr, S., & Pillai, N. S. (2016). The relationship between school's organizational climate and teacher's job satisfaction: Malaysian experience. *Asia Pacific Education Review*, *17*(1), 87. doi:10.1007/s12564-015-9411-8
- Goddard, R., Goddard, Y., Kim, E. S., & Miller, R. (2015). A theoretical and empirical analysis of the roles of instructional leadership, teacher collaboration, and collective efficacy beliefs in support of student learning. *American Journal of Education*, *121*(4), 501–530. doi:10.1086/681925
- Goddard, Y., Goddard, R., & Kim, M. (2015). School instructional climate and student achievement: An examination of group norms for differentiated instruction. *American Journal of Education*, *122*(1), 111–131. doi:10.1086/683293
- Goddard, Y., & Kim, M. (2018). Examining connections between teacher perceptions of collaboration, differentiated instruction, and teacher efficacy. *Teachers College Record*, *120*(1).
- Gottfredson, G. D., & Gottfredson, D. C. (1989). *School climate, academic performance, attendance, and dropout*. Retrieved from <https://files.eric.ed.gov/fulltext/ED308225.pdf>
- Grayson, J. L., & Alvarez, H. K. (2008). School climate factors relating to teacher burnout: A mediator model. *Teaching and Teacher Education*, *24*(5), 1349–1363. doi:10.1016/j.tate.2007.06.005
- Green, S.B., & Salkind, N.J., (2014). *Using SPSS for Windows and Macintosh: Analyzing and understanding data*. (7th ed.). Upper Saddle River, NJ: Pearson Education.
- Greenwald, R., Hedges, L. V., & Laine, R. D. (1996). The effect of school resources on student achievement. *Review of Educational Research*, *66*(3), 361–396. doi:10.2307/1170528
- Gregory, A., Cornell, D., Fan, X., Sheras, P., Shih, T., & Huang, F. (2010). Authoritative school

- discipline: High school practices associated with lower student bullying and victimization. *Journal of Educational Psychology*, *102*, 483–496. doi:10.1037/a0018562
- Grover, H., Limber, S., Boberience, L. (2015). Does it matter if students experience school as a place of community? *American Journal of Orthopsychiatry*, *85*(6), S79–S85. doi:10.1037/ort0000131
- Gülşen, C., & Gülenay, G. B. (2014). The principal and healthy school climate. *Social Behavior and Personality: An International Journal*, *42*(1), 93–100. doi:10.2224/sbp.2014.42.0.S93
- Guo, P., & Higgins-D'Alessandro, A. (2011). *The place of teachers' views of teaching in promoting positive school culture and student prosocial and academic outcomes*. Paper presented at the Association for Moral Education annual conference, Nanjing, China.
- Hall, G., & Hord S. (2001) *Implementing change: patterns, principles, and potholes*. Boston, MA: Allyn & Bacon.
- Hampden-Thompson, G., & Galindo, C. (2017). School-family relationships, school satisfaction and the academic achievement of young people. *Educational Review*, *69*(2), 248–265. doi:10.1080/00131911.2016.1207613
- Han, W., & Bridglall, B. L. (2009). Assessing school supports for ELL students using the ECLS-K. *Early Childhood Research Quarterly*, *24*(4), 445–462. doi:10.1016/j.ecresq.2009.08.003
- Hartup, W., & Stevens, N. (1997). Friendships and adaptation in the life course. *Psychological Bulletin*, *121*(3), 355–370. doi:10.1037/0033-2909.121.3.355
- Hattie, J. (2008). *Visible learning*. Abingdon, England: Routledge.
- Heal, K. H. (1978). Misbehavior among school children: The role of the school in strategies for

- prevention. *Policy and Politics*, 6, 321–333. doi:10.1332/030557378782842614
- Heck, R. H. & Hallinger, P. (2010). Collaborative leadership effects on school improvement: integrating unidirectional-and reciprocal-effects models. *The Elementary School Journal*, 111(2), 226–252.
- Henry, D. B., Farrell, A. D., Schoeny, M. E., Tolan, P. H., & Dymnicki, A. B. (2011). Influence of school-level variables on aggression and associated attitudes of middle school students. *Journal of School Psychology*, 49, 481–503. doi:10.1016/j.jsp.2011.04.007
- Higgins-D'Alessandro, A. (2002). The necessity of teacher development. *New Directions for Child and Adolescent Development*, 2002(98), 75–84. doi:10.1002/cd.60
- Higgins-D'Alessandro, A. (2011). The structures of a liberal education, *Ethos*, 10(4), 4–9. doi:10.1080/03057240.2011.596343
- Hoge, D. R., Smit, E. K., & Hanson, S. L. (1990). School experiences predicting changes in self-esteem of sixth and seventh-grade students. *Journal of Educational Psychology*, 82, 117–127. doi:10.1037/0022-0663.82.1.117
- Holdsworth, S., & Maynes, N. (2017). “But what if I fail?” A meta-synthetic study of the conditions supporting teacher innovation. *Canadian Journal of Education*, 40(4), 665–703.
- Hoy, W. K., & Woolfolk, A. E. (1993). Teachers' sense of efficacy and the organizational health of schools. *The Elementary School Journal*, 93(4), 355-372. doi:10.1086/461729
- Hughes, J. N., Cavell, T. A., & Jackson, T. (1999). Influence of the teacher–student relationship on childhood conduct problems: A prospective study. *Journal of Clinical Child Psychology*, 28(2), 173–184. doi:10.1207/s15374424jccp2802\_5

- Ihtiyaroglu, N., & Ottekin Demirbolat, A. (2016). Analysis of relationships between school climate, teacher effectiveness and students' school commitment. *International Online Journal of Educational Sciences*, 8(4). doi:10.15345/iojes.2016.04.020
- Ingersoll, R. M. (2001). Teacher turnover, teacher shortages, and the organization of schools. *American Educational Research Journal*, 38(3), 499–534.  
doi:10.3102/00028312038003499
- Jackson, C., Johnson, R. C., & Persico, C. (2016). The effects of school spending on educational and economic outcomes: Evidence from school finance reforms. *The Quarterly Journal of Economics*, 131(1), 157–218. doi:10.1093/qje/qjv036
- James, A. G., Smallwood, L., Noltemeyer, A., & Green, J. (2018). Assessing school climate within a PBIS framework: Using multi-informant assessment to identify strengths and needs. *Educational Studies*, 44(1), 115–118. doi:10.1080/03055698.2017.1347495
- Johnson, B. (2001). Toward a new classification of nonexperimental quantitative research. *Educational Researcher*, 30(2), 3–13. doi:10.3102/0013189X030002003
- Johnson, B., & Stevens, J. J. (2001). Exploratory and confirmatory factor analysis of the School Level Environment Questionnaire (SLEQ). *Learning Environments Research*, 4(3), 325–344. doi:10.1023/A:1014486821714
- Johnson, B., & Stevens, J. (2006). Student achievement and elementary teachers' perceptions of school climate. *Learning Environments Research*, 9, 111–122. doi:10.1007/s10984-006-9007-7
- Johnson, B., Stevens, J., & Zvoch, K. (2007). Teachers' perceptions of school climate: A validity study of scores from the revised school level environment questionnaire. *Educational and Psychological Measurement*, 67(5), 833–844. doi:10.1177/0013164406299102

- Karakos, H. L., Voight, A., Geller, J. D., Nixon, C. T., & Nation, M. (2016). Student civic participation and school climate: Associations at multiple levels of the school ecology. *Journal of Community Psychology, 44*(2), 166–181. doi:10.1002/jcop.21748
- Kerr, D., Ireland, E., Lopes, J., Craig, R., & Cleaver, E. (2004). *Citizenship education longitudinal study: Second annual report: First longitudinal study*. Retrieved from <https://www.education.gov.uk/publications/eOrderingDownload/RB531.pdf>
- Kohlberg, L., & Mayer, R. (1972). Development as the aim of education: The Dewey view. *Harvard Educational Review, 42*, 449–496.
- Kosciw, J. G., & Elizabeth, M. D. (2006). *The 2005 National School Climate Survey: The experiences of lesbian, gay, bisexual and transgender youth in our nation's schools*. New York, NY: GLSEN.
- Kotok, S., Ikoma, S., & Bodovski, K. (2016). School climate and dropping out of school in the era of accountability. *American Journal of Education, 122*(4), 569–599. doi:10.1086/687275
- Kuhn, T. S. (1970) *The structure of scientific revolutions* (2nd ed). Chicago, IL: University of Chicago Press.
- Kumar, R. (2015). Perceptual differences about organizational climate and job satisfaction between teaching and non-teaching staff. *American Journal of Management, 15*(3), 87.
- Kuperminic, G. P., Leadbeater, B. J., Emmons, C., & Blatt, S. J. (1997). Perceived school climate and difficulties in the social adjustment of middle school students. *Applied Developmental Science, 1*, 76–88.



- Lacey, A., & Cornell, D. G. (2016). School administrator assessments of bullying and state-mandated testing. *Journal of School Violence, 15*, 189–212.  
doi:10.1080/15388220.2014.971362
- Lacoe, J. (2013). *Too scared to learn? The academic consequences of feeling unsafe at school* (Working paper no. 02–13). Institute for Education and Social Policy. Retrieved from <https://files.eric.ed.gov/fulltext/ED556783.pdf>
- Lee, V. E., & Bryk, A. S. (1989). A multilevel model of the social distribution of high school achievement. *Sociology of Education, 62*, 172–192. doi:10.2307/10.2307/
- Lim, S., & Eo, S. (2014). The mediating roles of collective teacher efficacy in the relations of teachers' perceptions of school organizational climate to their burnout. *Teaching and Teacher Education, 44*, 138–147. doi:10.1016/j.tate.2014.08.007
- Lin, S., Salazar, T., & Wu, S. (2018). Impact of academic experience and school climate of diversity on student satisfaction. *Learning Environments Research, 1*–17.  
doi:10.1007/s10984-018-9265-1
- London, R. A., Westrich, L., Stokes-Guinan, K., & McLaughlin, M. (2015). Playing fair: The contribution of high-functioning recess to overall school climate in low-income elementary schools. *Journal of School Health, 85*(1), 53–60. doi:10.1111/josh.12216
- MacNeil, A. J., Prater, D., & Busch, S. (2009). The effects of school culture and climate on student achievement. *International Journal of Leadership in Education, 12*(1), 73–84.
- Mainhard, M. T., Brekelmans, M., & Wubbels, T. (2011). Coercive and supportive teacher behaviour: Within- and across-lesson associations with the classroom social climate. *Learning and Instruction, 21*(3), 345–354. doi:10.1016/j.learninstruc.2010.03.003

- Malinen, O., & Savolainen, H. (2016). The effect of perceived school climate and teacher efficacy in behavior management on job satisfaction and burnout: A longitudinal study. *Teaching and Teacher Education, 60*, 144–152. doi:10.1016/j.tate.2016.08.012
- Malloy, M., Acock, A., DuBois, D. L., Vuchinich, S., Silverthorn, N., Ji, P., & Flay, B. R. (2015). Teachers' perceptions of school organizational climate as predictors of dosage and quality of implementation of a social-emotional and character development program. *Prevention Science, 16*(8), 1086–1095. doi:10.1007/s11121-014-0534-7
- Masko, A. L. (2018). Keep it real & love 'em up: Student-teacher relationships in an urban middle school. *Curriculum and Teaching Dialogue, 20*(1/2), 35–178.
- Maslow, A. H. (1943). A theory of human motivation. *Psychological Review, 50*, 370–396.
- Mathis, W. J. (2017). The effectiveness of class size reduction. *Psychosociological Issues in Human Resource Management, 5*(1), 176–183. doi:10.22381/PIHRM5120176
- Matteucci, M. C., Guglielmi, D., & Lauermann, F. (2017). Teachers' sense of responsibility for educational outcomes and its associations with teachers' instructional approaches and professional wellbeing. *Social Psychology of Education: An International Journal, 20*(2), 275. doi:10.1007/s11218-017-9369-y
- Mattison, E., & Aber, M. S. (2007). Closing the achievement gap: The association of racial climate with achievement and behavioral outcomes. *American Journal of Community Psychology, 40*, 1–12. doi:10.1007/s10464-007-9128-x
- Maxwell, L. E. (2016). School building condition, social climate, student attendance and academic achievement: A mediation model. *Journal of Environmental Psychology, 46*, 206–216. doi:10.1016/j.jenvp.2016.04.009

- Maxwell, S., Reynolds, K. J., Lee, E., Subasic, E., & Bromhead, D. (2017). The impact of school climate and school identification on academic achievement: Multilevel modeling with student and teacher data. *Frontiers in Psychology, 8*, 2069. doi:10.3389/fpsyg.2017.02069
- McCarley, T. A., Peters, M. L., & Decman, J. M. (2016). Transformational leadership related to school climate: A multi-level analysis. *Educational Management Administration & Leadership, 44*(2), 322–342. doi:10.1177/1741143214549966
- McCoy, D. C., Roy, A. L., & Sirkman, G. M. (2013). Neighborhood crime and school climate as predictors of elementary school academic quality: A cross-lagged panel analysis. *American Journal of Community Psychology, 52*(1), 128–140. doi:10.1007/s10464-013-9583-5
- McGiboney, G. (2016). *The psychology of school climate*. Newcastle, UK: Cambridge Scholars.
- McLean, L., Abry, T., Taylor, M., Jimenez, M., & Granger, K. (2017). Teachers' mental health and perceptions of school climate across the transition from training to teaching. *Teaching and Teacher Education, 65*, 230–240. doi:10.1016/j.tate.2017.03.018
- Meijer, M., Kuijpers, M., Boei, F., Vrieling, E., & Geijsel, F. (2017). Professional development of teacher-educators towards transformative learning. *Professional Development in Education, 43*(5), 819–840. doi:10.1080/19415257.2016.1254107
- Messacar, D., & Oreopoulous, P. (2013). Staying in school: A proposal for raising high-school graduation rates. *Issues in Science and Technology, 29*(2), 55–61.
- Mezirow, J. (1991). *Transformative dimensions of adult learning*. [Kindle version]. Retrieved from Amazon.com.

- Mezirow, J. (1997). Transformative learning: Theory to practice. *New Directions for Adult and Continuing Education*, 1997(74), 5–12. doi:10.1002/ace.7401
- Mezirow, J. (1998a). Postmodern critique of transformation theory: A response to Pietrykowski. *Adult Education Quarterly*, 49(1), 65–67. doi:10.1177/074171369804900107
- Mezirow, J. (1998b). Transformative learning and social action: A response to Inglis. *Adult Education Quarterly*, 49(1), 70–72. doi:10.1177/074171369804900109
- Mezirow, J. (2003). Transformative learning as discourse. *Journal of Transformative Education*, 1(1), 58–63. doi:10.1177/1541344603252172
- Miles, K. H., & Darling-Hammond, L. (1998). Rethinking the allocation of teaching resources: Some lessons from high-performing schools. *Educational Evaluation and Policy Analysis*, 20, 9–29.
- Minke, K. M., Sheridan, S. M., Kim, E. M., Ryoo, J. H., & Koziol, N. A. (2014). Congruence in parent-teacher relationships: The role of shared perceptions. *The Elementary School Journal*, 114(4), 527–546. doi:10.1086/675637
- Mitchell, C., & Sackney, L. (2016). School improvement in high-capacity schools: Educational leadership and living-systems ontology. *Educational Management Administration & Leadership*, 44(5), 853–868. doi:10.1177/1741143214564772
- Mitchell, M. M., & Bradshaw, C. P. (2013). Examining classroom influences on student perceptions of school climate: The role of classroom management and exclusionary discipline strategies. *Journal of School Psychology*, 51(5), 599–610.  
doi:10.1016/j.jsp.2013.05.005
- Mitchell, M. M., Bradshaw, C. P., & Leaf, P. J. (2010). Student and teacher perceptions of school climate: A multilevel exploration of patterns of discrepancy. *Journal of School*

- Health*, 80, 271–279. doi:10.1111/j.1746-1561.2010.00501.x
- National Center for Educational Statistics. (2015). *Private school enrollment*. U.S. Department of Education. Retrieved from [http://nces.ed.gov/programs/coe/pdf/coe\\_cgc.pdf](http://nces.ed.gov/programs/coe/pdf/coe_cgc.pdf)
- National School Climate Council. (2007). *The School Climate Challenge: Narrowing the gap between school climate research and school climate policy, practice guide lines and teacher education policy*. Retrieved from <http://www.schoolclimate.org/climate/advocacy.php>
- Nijs, M., Bun, C. J. E., Tempelaar, W. M., de Wit, N. J., Burger, H., Plevier, C. M., & Boks, M. P. M. (2014). Perceived school safety is strongly associated with adolescent mental health problems. *Community Mental Health Journal*, 50, 127–134. doi:10.1007/s10597-013-9599-1
- Noel, C., Slate, J., Brown, M., Tejada-Delgado, C. (2009). Campus-level decision-making practices: Principals and teachers differ in their views. *International Journal of Educational Leadership Preparation*, 4(2), 1-11.
- North Carolina Department of Education. (2018). *Professional teaching standards*. Retrieved from <http://www.ncpublicschools.org/>
- Oder, T., & Eisenschmidt, E. (2018). Teachers' perceptions of school climate as an indicator of their beliefs of effective teaching. *Cambridge Journal of Education*, 48(1), 3–20. doi:10.1080/0305764X.2016.1223837
- O'Malley, M., Voight, A., Renshaw, T. L., & Eklund, K. (2015). School climate, family structure, and academic achievement: A study of moderation effects. *School Psychology Quarterly*, 30(1), 142–157. doi:10.1037/spq0000076

- Ozen, H. (2018). A qualitative study of school climate according to teachers' perceptions. *Eurasian Journal of Educational Research, 18*, 1–18. doi:10.14689/ejer.2018.74.5
- Park, J., & Ham, S. (2016). Whose perception of principal instructional leadership? Principal-teacher perceptual (dis)agreement and its influence on teacher collaboration. *Asia Pacific Journal of Education, 36*(3), 450–469. doi:10.1080/02188791.2014.961895
- Payton, J. W., Weissberg, R. P., Durlak, J. A., Dymnicki, A. B., Taylor, R. D., Schellinger, K. B., & Pachan, M. (2008). *Positive impact of social and emotional learning for kindergarten to eighth-grade students: Findings from three scientific reviews* (Executive Summary). Retrieved from Collaborative for Academic, Social, and Emotional Learning website: <https://casel.org/wp-content/uploads/2016/06/the-positive-impact-of-social-and-emotional-learning-for-kindergarten-to-eighth-grade-students-technical-report.pdf>
- Pena-Shaff, J. B., Bessette-Symons, B., Tate, M., & Fingerhut, J. (2019). Racial and ethnic differences in high school students' perceptions of school climate and disciplinary practices. *Race Ethnicity and Education, 22*(2), 269–284. doi:10.1080/13613324.2018.1468747
- Perry, A. (1908). *The management of a city school*. New York, NY: Macmillan.
- Power, F. C., Higgins, A., & Kohlberg, L. (1989). *Lawrence Kohlberg's approach to moral education*. New York, NY: Columbia University Press.
- Price, H., & Moolenaar, N. (2015). Principal-teacher relationships: Foregrounding the international importance of principals' social relationships for school learning climates. *Journal of Educational Administration, 53*(1). doi:10.1108/JEA-11-2014-0134
- Purkey, S., & Smith, M. (1983). Effective schools: A review. *The Elementary School Journal, 83*, 427–452. doi:10.1086/461325

- Ramsey, C. M., Spira, A. P., Parisi, J. M., & Rebok, G. W. (2016). School climate: Perceptual differences between students, parents, and school staff. *School Effectiveness and School Improvement, 27*(4), 629–641. doi:10.1080/09243453.2016.1199436
- Rathmann, K., Herke, M., Heilmann, K., Kinnunen, J. M., Rimpelä, A., Hurrelmann, K., & Richter, M. (2018). Perceived school climate, academic well-being and school-aged children's self-rated health: A mediator analysis. *European Journal of Public Health, 28*(6), 1–7. doi:10.1093/eurpub/cky089
- Reeves, P. M., Pun, W. H., & Chung, K. S. (2017). Influence of teacher collaboration on job satisfaction and student achievement. *Teaching and Teacher Education, 67*, 227–236. doi:10.1016/j.tate.2017.06.016
- Reid, K. (1982). Retrospection and persistent school absenteeism. *Educational Research, 25*, 110–115.
- Reindl, M., Berner, V., Scheunpflug, A., Zeinz, H., & Dresel, M. (2015). Effect of negative peer climate on the development of autonomous motivation in mathematics. *Learning and Individual Differences, 38*, 68–75. doi:10.1016/j.lindif.2015.01.017
- Rentoul, A. & Fraser, B. (1983). Development of a school-level environment questionnaire. *Journal of Educational Administration, 21*(1), 21–39. doi:10.1108/eb009866
- Reynolds, D., Jones, D., St. Leger, S., & Murgatroyd, S. (1980). School factors and truancy. In L. Hersove & I. Berg (Eds.), *Out of school: Modern perspectives in truancy and school refusal* (pp. 27–39). Chichester, England: Wiley.
- Reynolds, K., Lee, E., Turner, I., Bromhead, D., & Subasic, E. (2017). How does school climate impact academic achievement? An examination of social identity processes. *School Psychology International, 38*(1), 78–97. doi:10.1177/0143034316682295

- Rigby, J., Larbi-Cherif, A., Rosenquist, B., Sharpe, C., Cobb, P., & Smith, T. (2017). Administrator observation and feedback: Does it lead toward improvement in inquiry-oriented math instruction? *Educational Administration Quarterly*, *53*(3), 475–516. doi:10.1177/0013161X16687006
- Rockenbach, A. B., & Mayhew, M. J. (2014). The campus spiritual climate: Predictors of satisfaction among students with diverse worldviews. *Journal of College Student Development*, *55*(1), 41–62. doi:10.1353/csd.2014.0002
- Ronfeldt, M., Farmer, S. O., McQueen, K., & Grissom, J. A. (2015). Teacher collaboration in instructional teams and student achievement. *American Educational Research Journal*, *52*(3), 475–514. doi:10.3102/0002831215585562
- Rudasill, K. M., Snyder, K. E., Levinson, H., & L. Adelson, J. (2018). Systems view of school climate: A theoretical framework for research. *Educational Psychology Review*, *30*(1), 35–60. doi:10.1007/s10648-017-9401-y
- Rumberger, R. (1987). High school dropouts: A review of issues and evidence. *Review of Education Research*, *57*, 1–29. doi:10.2307/1170232
- Rutter, M., Maughan, B., Mortimore, P., & Ouston, J. (1979). *Fifteen thousand hours: Secondary schools and their effects on children*. Cambridge, MA: Harvard University Press.
- Sakız, H. (2017). Impact of an inclusive programme on achievement, attendance and perceptions towards the school climate and social-emotional adaptation among students with disabilities. *Educational Psychology*, *37*(5), 611–631. doi:10.1080/01443410.2016.1225001
- Salkind, N. J. (2010). *Encyclopedia of research design*. Thousand Oaks, CA: Sage.



- Santiago, R. T., Garbacz, S. A., Beattie, T., & Moore, C. L. (2016). Parent-teacher relationships in elementary school: An examination of parent-teacher trust. *Psychology in the Schools, 53*(10), 1003–1017. doi:10.1002/pits.21971
- Saphier, J., & King, M. (1985). Good seeds grow in strong cultures. *Educational Leadership, 42*(6), 67–74. Retrieved from <https://eric.ed.gov/?id=EJ315265>
- Sarafidou, J., & Chatziioannidis, G. (2013). Teacher participation in decision making and its impact on school and teachers. *International Journal of Educational Management, 27*(2), 170–183. doi:10.1108/09513541311297586
- Schneider, B. (1987). The people make the place. *Personnel Psychology, 40*, 437–453. doi:10.1111/j.1744-6570.1987.tb00609.x
- Schneider, B. (2001). Fits about fit. *Applied Psychology: An International Review, 50*, 141–152. doi:10.1111/1464-0597.00051
- Schneider, S. H., & Duran, L. (2010). School climate in middle schools: A cultural perspective. *Journal of Research in Character Education, 8*(2), 25–37.
- Schueler, B. E., Capotosto, L., Bahena, S., McIntyre, J., & Gehlbach, H. (2014). Measuring parent perceptions of school climate. *Psychological Assessment, 26*(1), 314–320. doi:10.1037/a0034830
- Shakeel, M. D., & DeAngelis, C. A. (2018). Can private schools improve school climate? evidence from a nationally representative sample. *Journal of School Choice, 12*(3), 426–445. doi:10.1080/15582159.2018.1490383
- Shatzer, R. H., Caldarella, P., Hallam, P. R., & Brown, B. L. (2014). Comparing the effects of instructional and transformational leadership on student achievement: Implications for

- practice. *Educational Management Administration & Leadership*, 42(4), 445–459.  
doi:10.1177/1741143213502192
- Singh, K., & Billingsley, B. S. (1998). Professional support and its effects on teachers' commitment. *The Journal of Educational Research*, 91(4), 229–239.  
doi:10.1080/00220679809597548
- Sommer, B. (1985). What's different about truants? A comparison study of eighth graders. *Journal of Youth and Adolescence*, 14, 411–422. doi:10.1007/BF02138836
- Spilt, J. L., Koomen, H. M. Y., & Thijs, J. T. (2011). Teacher wellbeing: The importance of teacher-student relationships. *Educational Psychology Review*, 23(4), 457–477.  
doi:10.1007/s10648-011-9170-y
- Stewart, E. B. (2008). School structural characteristics, student effort, peer associations, and parental involvement: The influence of school- and individual-level factors on academic achievement. *Education & Urban Society*, 40, 179–204.
- Sulak, T. N. (2016). School climate and academic achievement in suburban schools. *Education and Urban Society*, 48(7), 672–684. doi:10.1177/0013124514541465
- Thapa, A., Cohen, J., Guffey, S., & Alessandro, A. (2013). A review of school climate research. *Review of Educational Research*, 83(3), 357–385. doi:10.3102/0034654313483907
- Thornberg, R., Wänström, L., Pozzoli, T., & Gini, G. (2018). Victim prevalence in bullying and its association with teacher-student and student-student relationships and class moral disengagement: A class-level path analysis. *Research Papers in Education*, 33(3), 320–335. doi:10.1080/02671522.2017.1302499

- Torres, A. C. (2016). The uncertainty of high expectations: How principals influence relational trust and teacher turnover in no excuses charter schools. *Journal of School Leadership*, 26(1), 61–91. doi:10.1177/105268461602600103
- Tschannen-Moran, M., & Gareis, C. R. (2015). Faculty trust in the principal: An essential ingredient in high-performing schools. *Journal of Educational Administration*, 53(1), 66-92. doi:10.1108/JEA-02-2014-0024
- Urick, A., & Bowers, A. J. (2014). The impact of principal perception on student academic climate and achievement in high school: How does it measure up? *Journal of School Leadership*, 24(2), 386.
- U.S. Census Bureau. (2018, March 11.). *Quick facts: North Carolina*. Retrieved from <https://www.census.gov/quickfacts/NC>
- U.S. Department of Education. (2010). *Safe and supportive schools*. Retrieved from <https://www2.ed.gov/programs/safesupportiveschools/2010-184y.pdf>
- U.S. Department of Education. (2016). *Department of Education releases resources on improving school climate*. Retrieved from <https://www.ed.gov/category/keyword/improving-school-climate>.
- U.S. Department of Labor. (2019). *Economic news release*. Retrieved from <https://www.bls.gov/news.release/empst.t04.htm>
- Van Eck, K., Johnson, S. L., Johnson, S. R., & Bettencourt, A. (2017). How school climate relates to chronic absence: A multi-level latent profile analysis. *Journal of School Psychology*, 61, 89–102. doi:10.1016/j.jsp.2016.10.001
- Vangrieken, K., Dochy, F., Raes, E., & Kyndt, E. (2015). Teacher collaboration: A systematic review. *Educational Research Review*, 15, 17–40. doi:10.1016/j.edurev.2015.04.002

- Voight, A., & Nation, M. (2016). Practices for improving secondary school climate: A systematic review of the research literature. *American Journal of Community Psychology, 58*(1–2), 174–191. doi:10.1002/ajcp.12074
- Waller, M. (2014). Building a constructive collaborative culture in schools. *Independence, 39*(2), 6–8.
- Wang, C., Berry, B., & Swearer, S. (2013). The critical role of school climate in effective bullying prevention. *Theory Into Practice, 52*(4), 296–302. doi:10.1080/00405841.2013.829735
- Wang, M., & Degol, J. (2016). School climate: A review of the construct, measurement, and impact on student outcomes. *Educational Psychology Review, 28*(2), 315–352.
- Wang, W., Vaillancourt, T., Brittain, H. L., McDougall, P., Krygsman, A., Smith, D., & Hymel, S. (2014). School climate, peer victimization, and academic achievement: Results from a multi-informant study. *School Psychology Quarterly, 29*(3), 360–377. doi:10.1037/spq0000084
- Warner, R. M. (2013). *Applied statistics: From bivariate through multivariate techniques* (2nd ed.). Thousand Oaks, CA: Sage.
- White, N., La Salle, T., Ashby, J. S., & Meyers, J. (2014). A brief measure of adolescent perceptions of school climate. *School Psychology Quarterly, 29*(3), 349–359. doi:10.1037/spq0000075
- Yoon, S. Y. (2016). Principals' data-driven practice and its influences on teacher buy-in and student achievement in comprehensive school reform models. *Leadership and Policy in Schools, 15*(4), 500–523. doi:10.1080/15700763.2016.1181187

Zhao, H., & Wu, S. (2014). The power of motivation-goal fit in predicting entrepreneurial persistence. *Social Behavior and Personality*, 42(8), 1345–1352.

doi:10.2224/sbp.2014.42.8.1345

Zhu, C., & Engels, N. (2014). Organizational culture and instructional innovations in higher education: Perceptions and reactions of teachers and students. *Educational Management Administration & Leadership*, 42(1), 136-158. doi:10.1177/1741143213499253

## Appendix A: Written Permission

Hello Cheryl,

You are welcome to use the Revised SLEQ in your study. Here is a link to some articles about the Revised SLEQ as well as the instrument and a scoring and factor guide.

[https://www.coe.arizona.edu/johnson\\_resources](https://www.coe.arizona.edu/johnson_resources)

Bruce Johnson  
Dean & Professor, College of Education  
Paul L. Lindsey & Kathy J. Alexander Chair  
University of Arizona



## Appendix B: IRB Approval Letter

# LIBERTY UNIVERSITY.

## INSTITUTIONAL REVIEW BOARD

June 18, 2019

Cheryl Turner Cavanaugh  
 IRB Exemption 3838.061819: Perceptual Differences in School Climate Between Administrators  
 and Teachers Within Christian Schools

Dear Cheryl Turner Cavanaugh,

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 that only includes interactions involving educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures, or observation of public behavior (including visual or auditory recording) if at least one of the following criteria is met:

- (i) The information obtained is recorded by the investigator in such a manner that the identity of the human subjects cannot readily be ascertained, directly or through identifiers linked to the subjects;

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](mailto:irb@liberty.edu)

Sincerely,

  
**G. Michele Baker, MA, CIP**  
*Administrative Chair of Institutional Research*  
 Research Ethics Office

**LIBERTY**  
 UNIVERSITY.

*Liberty University | Training Champions for Christ since 1971*

## Appendix C: Informed Consent

### CONSENT FORM

#### PERCEPTUAL DIFFERENCES IN SCHOOL CLIMATE BETWEEN ADMINISTRATORS AND TEACHERS WITHIN CHRISTIAN SCHOOLS

Cheryl Cavanaugh  
Liberty University  
School of Education

You are invited to be in a research study on teacher and administrator perceptions of school climate in Christian schools. You were selected as a possible participant because you either teach or work as an administrator at an ACSI high school. Read this form and ask any questions you may have before agreeing to be in the study.

Cheryl Cavanaugh, a doctoral candidate in the School of Education at Liberty University, is conducting this study.

**Background Information:** The purpose of this study is to examine school climate from the perspectives of teachers and administrators in Christian schools. Statistical analyses will be applied to the responses of the survey questions to determine if there are any differences in perspectives between the teachers and administrators. Perceptual differences among school leaders and teachers need to be exposed and reconciled for a school to accomplish its mission. The study explains the implications of school climate on student and school success, and it recommends areas of future research.

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

1. Click on the **NEXT** button below.
2. Answer 5 demographic questions.
3. Answer the 21 survey questions, by selecting either *strongly disagree*, *disagree*, *neither disagree or agree*, *agree*, or *strongly agree*
4. Click **COMPLETE** when you have answered all the questions

**Risks:** The risks involved in this study are minimal, which means they are equal to the risks you would encounter in everyday life.

**Benefits:** When applied to a Christian school setting, school climate research is valuable and necessary for school improvement and sustainability. For Christian schools to succeed, they need to continuously evaluate their school climate and understand the perspectives of their teachers and leaders. If Christian schools evaluate the internal perspectives of their climate, they can use the data to unite their staff and accomplish their desired mission.

**Compensation:** Participants will not be compensated for participating in this study.

**Confidentiality:** The records of this study will be kept private. Research records will be stored securely, and only the researcher will have access to the records. Data will be stored on a



password locked computer and may be used in future presentations. After three years, all electronic records will be deleted

**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 ACSI. If you decide to participate, you are free to not answer any question or withdraw at any time prior to submitting the survey without affecting those relationships.

**How to Withdraw from the Study:** If you choose to withdraw from the study, please exit the survey and close your internet browser. Your responses will not be recorded or included in the study.

**Contacts and Questions:** The researcher conducting this study is Cheryl Cavanaugh. You may ask any questions you have now. If you have questions later, **you are encouraged** to contact her at [REDACTED] or [REDACTED]. You may also contact the researcher's faculty chair, Dr. Michelle Barthlow at [REDACTED]

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., Green Hall Ste. 2845, Lynchburg, VA 24515 or email at [irb@liberty.edu](mailto:irb@liberty.edu).

*Please notify the researcher if you would like a copy of this information for your records.*

**Statement of Consent:** I have read and understood the above information. I have asked questions and have received answers. I consent to participate in the study.

By clicking on the **Next** button below, I consent to participate in the study.