

COMPARATIVE ANALYSIS OF PRINCIPALS AND TEACHERS'
PERCEPTIONS OF WORKING CONDITIONS

by

Brandy Sermons

Liberty University

A Dissertation Presented in Partial Fulfillment

Of the Requirements for the Degree

Doctor of Education

Liberty University

2018

COMPARATIVE ANALYSIS OF PRINCIPALS AND TEACHERS'
PERCEPTIONS OF WORKING CONDITIONS

By Brandy Sermons

A Dissertation Presented in Partial Fulfillment

Of the Requirements for the Degree

Doctor of Education

Liberty University, Lynchburg, VA

2018

APPROVED BY:

Kimberly Lester, EdD, Committee Chair

Shawntrice Thomas, EdD, Committee Member

ABSTRACT

Prior research on school climate has focused on relationships between teachers and students, peer relationships, order and discipline, student engagement, and academic support to create an environment where students can be academically successful. No universally accepted standard definition encompasses all facets of the school climate construct. Although teacher working conditions have a direct impact on the future of students, few studies exist on teacher and principal perceptions of this construct. This comparative analysis study used archival data from the North Carolina Teacher Working Conditions Survey (NCTWCS) to determine if differences existed between teacher and principal perceptions of the working environment. A dataset containing 101,846 responses was used to analyze one research question. After data cleaning, a random selection of 100 teachers and 100 principals was taken from 33,379 clean cases. A multivariate analysis of variance was used to compare eight NCTWCS scale scores of the teachers and principals. Significant differences were found between teachers and principals on all eight scales. Principals and teachers are the driving forces behind school culture and a positive school climate. Understanding these differences can help to design policies that can create positive school climates and increase school improvement efforts. Implications are numerous because researchers can now state definitively that there are differences in teacher and principal perceptions of the working environment. Researchers can begin to ask why these differences exist and propose a way to lessen the gap. Principals and teachers may never completely agree on their perceptions of working conditions but they can work together to create an environment that inspires teacher retention and increased student achievement.

Keywords: perception of working conditions, school climate, TELL Survey, North Carolina teacher working conditions

Dedication

The completion of this dissertation marks the end of a long educational journey. One of the last conversations my grandmother had with me before she passed in 2016 was that she did not know how she was going to press on to be at my graduation. She said that even if they had to roll her into the ceremony she was going to be the one cheering the loudest. Although she will not be there in a physical body, she will be rejoicing in heaven. Throughout the years, she impressed upon my family that obtaining an education was important. She always had a word of encouragement when I wondered what I had gotten myself into and she prayed for me in the hard times. She inspired me to go beyond her high school education and achieve my dreams. I dedicate this achievement to the woman who inspired me and cheered me on, Katherleen Miller.

Acknowledgments

God – Thank you for your goodness, mercy, and the angels you sent to encourage me along the way.

Drs. Lester and Thomas – Thank you for the many reviews of my manuscript and for your encouragement. I would not have been able to finish this journey without you.

Vernon and Brenda Sermons – I thank God for blessing me with amazing parents. You encouraged me to keep going in every conversation and never let me forget that I am loved. You were never too busy to talk or pray over the phone. I always know I can count on you in any situation.

To the many people who cheered and prayed for me along the way, thank you so much for your support.

Table of Contents

ABSTRACT	3
Dedication	4
Acknowledgments	5
List of Tables	9
List of Figures	10
CHAPTER ONE: INTRODUCTION	11
Overview	11
Background	11
Problem Statement	15
Purpose Statement	15
Significance of the Study	16
Research Question	17
Definitions	17
CHAPTER TWO: LITERATURE REVIEW	18
Overview	18
Theoretical Framework	18
School Climate Framework	22
Organizational Climate	22
School Climate	23
Social Climate	25
Classroom Climate	29
Racial Climate	33

The Effects of the Subclimates of School Climate in Education.....	34
Teacher Working Conditions.....	38
Teacher Motivations	38
Teacher Well-being.....	39
Professional Environment.....	41
Teacher Leadership.....	44
School Leadership.....	47
Summary.....	50
CHAPTER THREE: METHODS.....	52
Overview.....	52
Design	52
Research Question	52
Null Hypothesis	53
Participants and Setting.....	53
Instrument	54
Procedures.....	57
Data Analysis	57
CHAPTER FOUR: RESULTS	59
Overview.....	59
Research Question	59
Null Hypothesis	59
Descriptive Statistics of Data Set.....	59
Random Sample of Cases for Analysis.....	60

Reliability of Scales	61
Results.....	62
Summary.....	64
CHAPTER FIVE: CONCLUSIONS	65
Overview.....	65
Discussion.....	65
Implications.....	70
Limitations	71
Recommendations for Future Research	72
REFERENCES	74

List of Tables

Table	Page
1. Characteristics of Database ($n = 101,846$).....	54
2. Items on the 2016 NCTWCS Scales.....	56
3. Characteristics of Clean Dataset ($n = 33,379$).....	60
4. Characteristics of Random Sample ($n = 197$).....	61
5. Reliability (Cronbach Alpha) of Selected Scales of the NCTWCS.....	62
6. Results of MANOVA Comparison of Teacher and Principal Responses to the NCTWCS	63

List of Figures

1. Box Plots of Teacher and Principal Responses to Eight Scales of the NCTWCS.....64

CHAPTER ONE: INTRODUCTION

Overview

School climate is becoming a popular research topic and is associated with social, emotional, and academic success (La Salle, Zabek, & Meyers, 2016; Voight, Hanson, O'Malley, & Adekanye, 2015). Unfortunately, no universally accepted standard definition encompasses all facets of the construct (Huang et al., 2015; Momna & Anis-ul-Haque, 2014). As research becomes available on one aspect, another layer of school climate is unearthed (Kim, Schwartz, Cappella, & Seidman, 2014). A multilayered construct, school climate includes the working conditions for the school staff and is the backbone of the school (Kilinc, 2014). However, staff working conditions are not a topic that has been seriously researched (Huang et al., 2015). Staff perceptions of their working conditions affect school climate, culture, and effectiveness (Pogodzinski, 2014). In addition, staff perceptions determine their interactions with each other, students, the community, and how they share their knowledge in the classroom (König, Blömeke, & Kaiser, 2015). All the constructs that make up school climate work together to influence academic achievement (Musselman, Crittenden, & Lyons, 2014). Researchers have established a correlation between a positive school climate and increased academic achievement, student engagement, and enthusiasm to learn (La Salle et al., 2016). The potential flexibility of school climate draws the curiosity of educators and those looking to improve the educational environment (Huang et al., 2015).

Background

The educational system has evolved into a complex network that requires interdependence amongst multiple moving parts to create a positive environment where students are successful (Tschannen-Moran & Gareis, 2015). Therefore, school climate is a vital construct

interwoven into the fabric of a school and displayed by unique school characteristics (Kilinc, 2014). Diverse terminology, such as environment, ambiance, beliefs, character, and setting, is used to describe school climate (Momna & Anis-ul-Haque, 2014). The concept of school climate has been linked to psychology, school effectiveness, leadership, and education and it encompasses ideas from each area (Kilinc, 2014; Momna & Anis-ul-Haque, 2014; Voight et al., 2015). Although a great deal of research has been conducted on school climate, there are still additional nuances to be uncovered as the educational system evolves (Kim et al., 2014).

Areas such as teacher working conditions or job satisfaction provide unique theories that can be associated with school climate. Organizational theory states that employee fulfillment and productivity are directly correlated to working conditions (Pogodzinski, 2014). Similarly, the economic theory of utility maximization posits that teachers pursue working conditions that increase their happiness (Pogodzinski, 2014). The person-environment theory suggests that individuals examine their characteristics with their environment to see if they are compatible (Voight et al., 2015). These theories combine to suggest that employees find environments that fit their personal values and contribute to their productivity and happiness (Pogodzinski, 2014; Voight et al., 2015).

Research on school climate is not a recent phenomenon. One of the first articles on school climate was published over 100 years ago (Hung, Luebbe, & Flaspohler, 2015). Prior research on school climate has been focused on relationships between teachers and students, peer relationships, order and discipline, student engagement, and academic support (Hung et al., 2015). Some research on school climate has been derived from organizational psychology and school effectiveness, often sharing instruments, theories, and methods from both subjects (Momna & Anis-ul-Haque, 2014). School climate is a dynamic construct requiring constant

attention and intentionality to create an environment where students can be academically successful (Tschannen-Moran & Gareis, 2015). Each construct and person involved at the school, from administrators to students, has a role in school climate and academic achievement (Tschannen-Moran & Gareis, 2015). Educational stakeholders must be confident in each other's abilities through a shared vision to create a successful school climate, empower students to achieve more through skills learned at school, and attain established educational goals (Musselman et al., 2014; Tschannen-Moran & Gareis, 2015).

In the last half century researchers have searched for an explanation regarding the reason certain teachers appear to be more effective and have higher student test scores (Hill, Blazar, & Lynch, 2015). In the 1980s, researchers began to explore teacher content knowledge and its affect on student achievement (Hill et al., 2015). Researchers have been able to determine a correlation between student achievement and learning opportunities (Hill et al., 2015). The literature shows that teachers who are prepared and experienced in the classroom have higher student learning rates (Hill et al., 2015).

The educational system has been under review and reorganization for more than 30 years; however, 1983 marks the beginning of current accountability reform with publication of the findings from the National Commission on Excellence in Education (Tschannen-Moran & Gareis, 2015). Additional highlights since 1983 include the 1991 publication of curriculum standards by the National Council of Teachers of Mathematics, the passage of No Child Left Behind Act of 2001, and the adoption of the Common Core State Standards (Tschannen-Moran & Gareis, 2015). As the educational reform movement strengthened, researchers started to focus on teachers as leaders and teachers took on administrative roles in order to increase student achievement (Musselman et al., 2014).

As a part of educational reform, school structure is a factor in school climate due to the various social interactions among the students and their perception of the interchanges (Gomez, Marcoulides, & Heck, 2012). The emphasis on educational reform is due to a call for increased accountability in education that has led stakeholders to review school conditions such as school structure and school climate (Mitchell, Mendiola, Schumacker, & Lowery, 2016). In addition, the type of school structure matters because “different models for school structure have been used over the past century in the American educational school system to address issues with helping adolescents transition from elementary school settings to high school settings” (Gomez et al., 2012, p. 205).

At the beginning of the 20th century, school trends began to change. Students completed kindergarten through eighth grade but less than 10% completed high school (Gomez et al., 2012). As the century continued, educators struggled with a way to transition from elementary school to high school, so their solution was to create a junior high model that consisted of seventh through ninth grade (Gomez et al., 2012). In the 1960s and 1970s, educators reformatted the school model to have sixth through eighth graders at their own school and aptly named it middle school to meet students’ social and academic needs as they transitioned from elementary school to high school (Gomez et al., 2012). However, educators are still trying to find a way to meet the needs of this impressionable group of students and some schools have adapted a K–8 model (Gomez et al., 2012). Research has shown a positive outcome for the K–8 grade school model because students do not have to adjust to the realities of another school but that does not mean this setting is better than a middle school setting (Gomez et al., 2012). The different age groupings play a part in the way students interact with each other, their academic achievement, and how they feel about school (Gomez et al., 2012). The unique texture of the educational

system framework has multifaceted affects on school climate (Huang et al., 2015). Many factors within the educational system are interwoven and affect different aspects of school climate and teacher working conditions.

Problem Statement

Every person in the workforce has working conditions, whether good or bad. Teachers are no exception; however, their working conditions have a direct impact on the future of their students (New Teacher Center, 2016). Teacher working conditions, such as “school-level conduct management, manageable demands on time, ample professional autonomy, and effective professional development are found to be significant predictors of student perception, of support and rigor, and ultimately of value-added student learning gains” (New Teacher Center, 2014). Research on teacher working conditions focuses on school climate through a different lens (Pogodzinski, 2014). Due to the number of constructs related to school climate it is no surprise that there has been a surge in studies on the school environment in recent years (Kilinc, 2014).

Research has shown that teachers and principals have a vast influence on school climate (Kilinc, 2014; Pogodzinski, 2014). Administrators set the tone for school climate and teachers who do not feel their voice will be heard in the decision-making process are more likely to leave their jobs (New Teacher Center, 2016; Pogodzinski, 2014). Unfortunately, this does not translate into research about working conditions in a school environment (Wong, 2015). The problem is that research is being conducted about each construct separately, but there are few studies on teachers and principals’ perceptions of school climate (Kilinc, 2014).

Purpose Statement

The purpose of this study was to gain insight into how teachers and principals perceive the climate in their schools. The North Carolina Teacher Working Conditions survey was

distributed for the first time in 2002 as part of the Governor's Teacher Working Conditions Initiative and is conducted biennially (New Teacher Center, 2016). The survey on teacher working conditions has been used by North Carolina to start several school reform initiatives (New Teacher Center, 2016). The North Carolina Teacher Working Conditions survey was used to evaluate teachers and principals' perceptions of their working conditions and to understand individual school climate constructs and evaluate them on a holistic level to determine perceptions of teacher working conditions (New Teacher Center, 2014).

Significance of the Study

This study is significant because it added to the research on two of the most influential factors in school climate—teachers and principals (Kilinc, 2014). North Carolina is a trendsetter by using the North Carolina Teacher Working Conditions survey to create reform within their state (New Teacher Center, 2014). Because of their success, other states are following suit to evaluate teacher working conditions (New Teacher Center, 2014). Few studies have looked at working conditions or school resources in relation to teacher quality or teacher retention (Adamson & Darling-Hammond, 2012). This study was used to take a broad look at these factors as they relate to working conditions.

Even though the North Carolina Teacher Working Conditions survey has been used previously, the data has not been used to determine if principals and teachers agree on their perceptions of school climate in their schools. If they do not agree on their perceptions, then more information is needed to determine how they can work together to positively influence school climate. School climate is a multilayered construct with many moving pieces (Pogodzinski, 2014). It takes everyone working together with a shared vision to make a outcome positive (Pogodzinski, 2014). The results of this study can be used to open the door for a

constructive conversation between educators at all levels to ensure they are working together instead of against each other.

Research Question

RQ: Are there statistically significant differences in perceptions of working conditions between principals and teachers as measured by eight scales of the North Carolina Teacher Working Conditions Survey?

Definitions

1. *School climate* – School climate combines the social and physical aspects of the school environment, which includes school culture, organizational structure, community atmosphere, values, and beliefs, discipline, and school leadership (Jain, Cohen, Huang, Hanson, & Austin, 2015).
2. *Social climate* – The sociocultural subsystem of the school cultural system is measured by organizational structure, which is composed of the philosophies about the organization and the processes implemented to achieve operational outcomes and the managerial process, which is the function of the organization as determined by availability of resources, administrative responsiveness, and school leadership (Gomez et al., 2012).
3. *Working conditions* – The terms teacher working conditions or working conditions have a broad spectrum that includes “professional teaching conditions, such as the availability of instructional materials, class sizes, the attractiveness and safety of facilities, high-quality leadership, and professional learning opportunities” (Adamson & Darling-Hammond, 2012, p. 9).

CHAPTER TWO: LITERATURE REVIEW

Overview

The concept of teacher working conditions is a researchable topic (Pogodzinski, 2014). Although it is part of school climate, it looks at the same constructs through a different lens (Pogodzinski, 2014). Teachers are not frequently surveyed about their insights about school climate (Kilinc, 2014). However, their behaviors are affected by school climate, thereby influencing their interactions in the classroom (Kilinc, 2014; Pogodzinski, 2014).

Theoretical Framework

With the multifaceted layers of school climate, several theoretical frameworks can be applied. School climate is not founded in any specific area (Jain et al., 2015; Momna & Anis-ul-Haque, 2014). School climate has been linked to psychology, school effectiveness, and school leadership (Jain et al., 2015; Kilinc, 2014; Momna & Anis-ul-Haque, 2014). A great deal of research exists in those fields but no frameworks are tied specifically to school climate or teacher working conditions (Jain et al., 2015; Momna & Anis-ul-Haque, 2014). As research on school environment grows, a theoretical framework that encompasses school climate or teacher working conditions as a whole may garner approval. To date, frameworks from a variety of disciplines, such as psychology and leadership, have been used when school climate or working conditions are researched (Jain et al., 2015; Momna & Anis-ul-Haque, 2014).

Organizational theory states that employee fulfillment and productivity are directly correlated to working conditions (Pogodzinski, 2014). It is natural that employees who are happy with their working conditions are fulfilled and productive. Teachers are no exception and they have a major influence on objectives for the school environment. In a broad sense, the school is an organization that has specific, measured outcomes (Pogodzinski, 2014).

The economic theory of utility maximization states that teachers pursue working conditions that increase their happiness (Pogodzinski, 2014). Each school has a culture that appeals to certain types of teachers. The culture that appeals to one teacher might not appeal to another. Therefore, teachers may change schools to find an environment that appeals to them. In some cases, that means leaving less desirable schools with unhappy teachers who are unable to change their environment (Pogodzinski, 2014). This unhappiness increases teachers stress levels and their desire to leave the profession (Chesnut & Cullen, 2014; Wong, 2015).

Karasek's demand-control-support model of psychosocial work conditions states that stress occurs when the mental demands of the job are high and have minimal support (Borrelli, Benevene, Fiorilli, D'Amelio, & Pozzi, 2014). There is a correlation between demands of the job and teachers' mental health as depression and anxiety are influenced by teacher working conditions (Borrelli et al., 2014). Teachers in environments that are unappealing to them will have increased stress that may cause mental health issues (Chesnut & Cullen, 2014). Because teachers have direct contact with students on a regular basis, these issues will affect the teaching and learning in the classroom (Chesnut & Cullen, 2014; Kaplan Toren & Seginer, 2015).

Organizational theory, economic theory of utility maximization, and Karasek's demand-control-support model of psychosocial work conditions refer to teacher working conditions. Unsatisfied teachers have increased stress levels and their frustration shows in the classroom (Borrelli et al., 2014; Chesnut & Cullen, 2014). Students feel this stress as it plays out in the classroom and their academic achievement is reduced (Chesnut & Cullen, 2014; Kaplan Toren & Seginer, 2015).

Teacher working conditions is a measure of school climate. However, school climate incorporates a different set of theories. One theory pertaining to school climate is the

authoritative school climate theory that suggests there are two key dimensions of school climate: (a) the firm but unbiased enforcement of rules and (b) caring, considerate staff that are willing to help students (Huang et al., 2015). The authoritative school climate theory is derived from Baumrind's authoritative parenting research that suggests that combining firm discipline with supportiveness is the most effective parenting technique (Huang et al., 2015). Furthermore, the aspect of discipline in parenting has been found to increase academic achievement and performance (Baumann & Krskova, 2016). Researchers are looking for ways to incorporate authoritative parenting techniques into the school system (Baumann & Krskova, 2016). Authoritative school climate theory suggests that a supportive, structured school will have highly engaged, less aggressive students (Huang et al., 2015). An authoritative climate in the classroom can create a positive relationship between teachers and students (Yoon & Bauman, 2014). A well thought out discipline structure in schools is linked to higher academic performance (Baumann & Krskova, 2016).

Also related to school climate is the person-environment fit theory that suggests that positive school climates improve academic achievement by fostering interest and motivation (Voight et al., 2015). The person-environment fit theory states that when people see their characteristics, proficiencies, and inclinations are harmonious with their social environment, accomplishments and security are amplified (Voight et al., 2015). Learning does not occur without the aspiration to learn, which includes concepts such as purpose, viewpoints, principles, self-efficacy, and interest (Christensen & Knezek, 2015).

The age-stability theory believes that social and political attitudes are developed prior to high school (Christensen & Knezek, 2015). The social behaviors learned and reinforced at school such as bullying can negatively affect many areas in the lives of the bullies and their

victims (Connell, El Sayed, Reingle Gonzalez, & Schell-Busey, 2015). It is important to have a positive environment early in life to help shape students' adult behaviors (Christensen & Knezek, 2015). Students will likely mimic the behaviors of their friends (Connell et al., 2015).

Moreover, actions may stem from beliefs that are by-products of knowledge (Christensen & Knezek, 2015). The social norms of the school form the basis for student behaviors later in life. If it is acceptable to bully someone at school, this behavior will most likely continue into adulthood (Christensen & Knezek, 2015; Connell et al., 2015). Therefore, teachers should be aware of the behavior of students in the classroom environment. Teachers' classroom structures set the foundation for their students' futures (Christensen & Knezek, 2015).

In a similar manner, the theory of planned behavior suggests that principles are used to predict intent to participate in behavior (Christensen & Knezek, 2015; Yoon & Bauman, 2014). The expectancy value model states that people are more likely to participate in behaviors they see as positive (Christensen & Knezek, 2015). Using the example of bullying, if students are praised for stopping this type of behavior, they are more likely to try to intervene or notify someone about it (Christensen & Knezek, 2015). However, teachers are more likely to intervene with authority and set the example for the classroom social climate (Yoon & Bauman, 2014).

The topic of teacher working conditions not only includes the administrative side but it also includes what happens in the classroom (Christensen & Knezek, 2015; Pogodzinski, 2014). Working conditions is a multilayered framework that combines many theories to bridge the gap between school climate and job satisfaction (Chesnut & Cullen, 2014; Wong, 2015). These theories regarding teacher working conditions and school climate merge together to form an interconnected framework. The teacher's life outside the classroom affects what happens in the classroom, which then affects academic achievement. These areas work together to either create

a positive or negative environment for teachers, staff, and students (Chesnut & Cullen, 2014; Kaplan Toren & Seginer, 2015).

School Climate Framework

The school climate framework consists of a variety of subclimates that establish and influence the school environment (Jain et al., 2015; Momna & Anis-ul-Haque, 2014). These subclimates add a unique perspective but leave a distinct impression as they intertwine to create the school and academic environments (Musselman et al., 2014). These subclimates are researched individually and form a loose framework for researchers to use to explore school climate. Additional subclimates and insights are added as the body of research grows (Kim et al., 2014).

Organizational Climate

Organizational culture is important because an organization is made up of people (Gulsen & Gulenay, 2014). An organization has common beliefs and values that unify its mission, although the people within it may have a different set of beliefs and values (Gulsen & Gulenay, 2014). Therefore, organizational culture replicates the shared values, beliefs, and behaviors of the directive and descriptive sample (Gulsen & Gulenay, 2014). For instance, leaders who share core values with their members strengthen the ability to “develop schools as centers for creativity and human development amidst an educational policy driven by productivity measured by standardized test and international comparisons” (Snyder, 2015, p. 217).

These shared beliefs strengthen the culture (Gulsen & Gulenay, 2014; Snyder, 2015). The leadership of an educational organization should provide a strong culture and leadership force (Gulsen & Gulenay, 2014). Specifically, the people in an organization benefit from an engaging leader who uses a distinct value system as a guide to create a culture (Snyder, 2015).

School leadership establishes customs and constructs that affect the quality and culture of the school and ultimately affect classroom activities (Tschannen-Moran & Gareis, 2015).

The organizational climate refers to the tangible elements of culture (Gulsen & Gulenay, 2014). Organizational climate is described as the unique qualities that set an organization apart based on the shared beliefs of the people in the organization. Climate is a psychological notion that resounds within the organization and has a regular and steady characteristic that affects behaviors and is felt and perceived by those in the organization without being written (Gulsen & Gulenay, 2014). Similarly, the organizational school climate is based on perceptions of the school leadership (Momna & Anis-ul-Haque, 2014).

School Climate

Many definitions of school climate and constructs are part of its framework (Huang et al., 2015). Each definition captures school climate in a distinctive manner and allows researchers to add another layer to the multilayered framework (Jain et al., 2015; Kilinc, 2014; Momna & Anis-ul-Haque, 2014). School climate is an influential and multilayered construct affecting the school community and educational environment (Kilinc, 2014) and is extensively documented as an influential factor of behavior and adjustment in school (Huang et al., 2015). Additionally, school climate is the noticeable form of school culture (Gulsen & Gulenay, 2014). The school culture is comprised of many important subsystems such as the sociocultural subsystem, organizational value subsystem, and individual belief subsystem. These subsystems are integral to the school climate framework (Gomez et al., 2012).

With this in mind, school climate is an expansive construct that includes teachers and leaders' perceptions of working conditions in their schools (Gulsen & Gulenay, 2014).

Stakeholders develop an opinion of the school using their perception of the climate (Momna &

Anis-ul-Haque, 2014). It is possible for schools to create a positive perception of school climate for one group of students and a negative perception of school climate for another group due to many subclimates (Momna & Anis-ul-Haque, 2014; Voight et al., 2015). However, school climate is also the reflection of staff perceptions on their working conditions (Kilinc, 2014). Working conditions consist of a social climate and the dynamics of the school (Kilinc, 2014).

School climate is referred to as a connectedness to school, an ability to have meaningful contributions, and the capacity to have quality relationships in the school environment. Those characteristics are major factors in academic achievement and student behavior (Voight et al., 2015). The character of the school is important especially because “there are complex sets of forces, including school climate and school safety, that shape the quality and character of each school and we have much to learn about the specific needs of different types of schools” (Kõiv, 2014, p. 205). In a similar manner, school climate is the internal characteristics that differentiate schools and influence school member attitudes and behaviors through official and unofficial rules, methods, and guidelines (Momna & Anis-ul-Haque, 2014). School climate can also be described as the educational environment fashioned from the dynamics of relationships, physical surroundings, and the psychological ambiance of the school (Momna & Anis-ul-Haque, 2014).

School climate is related to teachers’ focus on student achievement, academic standards, and a shared vision with stakeholders and the community (Tschannen-Moran & Gareis, 2015). School climate combines the social and physical aspects of the school environment, which includes school culture; organizational structure; an atmosphere that embraces community, values, and beliefs; discipline; and school leadership (Jain et al., 2015). McCormick, Cappella, O’Connor, & McClowry (2015) surveyed stakeholders and found several components of school climate: (a) parental and community involvement, (b) teacher and administrator expertise and

leadership, and (c) the learning and instructional environment. These components were summarized by McCormick et al. (2015) into (a) leadership (the degree of school leaders' instructional support and trusting staff relationships), (b) accountability (teachers' perception of the schools' academic standards), and (c) safety/respect (the perception of the physical and emotional safety of the school).

Ferráns and Selman (2014) found in student interviews that they had recommendations for ways schools can improve school climate. Research has shown a positive bidirectional relationship between school climate and student achievement (Voight et al., 2015). In a similar manner, there is a correlation between school climate and the academic achievement, developmental processes, and welfare of students (McCormick et al., 2015).

These definitions vary but they emphasize the need to continue to build a framework for school climate (Huang et al., 2015). There are various overlapping constructs in each definition that allow researchers to add a new element to the school climate constructs and framework (Huang et al., 2015). Although researchers are varied in their interpretations of school climate, there are reoccurring themes such as relationships, culture, safety, and academics.

Social Climate

Another aspect of school climate is the social climate. The perceived social climate, namely acceptance and well-being, is linked to improved psychological adjustment (Kaplan Toren & Seginer, 2015). Psychological skills such as conflict resolution and behavioral and emotional adaptation are important for academic achievement (McCormick et al., 2015).

Individuals have a vastly different encounter, based on their personal experiences, of the same situation (Momna & Anis-ul-Haque, 2014; Voight et al., 2015). The sociocultural subsystem of the school cultural system is measured by organizational structure. The organizational structure

is composed of (a) the philosophies about the organization and the processes implemented to achieve operational outcomes and (b) the managerial process, which is the function of the organization as determined by availability of resources, administrative responsiveness, and school leadership (Gomez et al., 2012).

The distinctive social structures in each school have the potential to create a climate where bullying and cyberbullying are unmonitored and escalate to unmanageable proportions (Ferrás & Selman, 2014; McCormick et al., 2015). This type of atmosphere allows students to inflict harmful assaults on their peers and allow open wounds to fester (Baly, Cornell, & Lovegrove, 2014; Ferrás & Selman, 2014). Research has shown that students learn from each other and are more likely to participate in harmful behaviors with their friends (Christensen & Knezek, 2015; Ferrás & Selman, 2014.). Kõiv (2014) linked teacher support and school policies against violence, such as preventative programs, to diminished antisocial behavior and an increased perception of safety at school.

Both social and academic learning take place in the classroom setting (Kaplan Toren & Seginer, 2015). Teachers influence the social climate of the classroom through their responses to student behaviors, thereby contributing to the hidden curriculum (García & De Lissovoy, 2013; Yoon & Bauman, 2014). The hidden curriculum is the unintentional norms and values represented at school through everyday interaction. The hidden curriculum is “essentially the process of socialization that takes place in the school as students are exposed to the routines and rituals that structure classroom culture” (García & De Lissovoy, 2013, p. 51). The standard curriculum may feel narrow to students and teachers, “but students’ lives often beg attention beyond standardized curriculums, and unless we address internal and external conflicts in middle school, students may become disillusioned and look forward only to the day they can drop out”

(Hansen, 2014, p. 21). The hidden curriculum is a major way to bring students' lives, hopes, and dreams into the classroom and to enable them to see beyond where they are to where they can go in the future (Kaplan Toren & Seginer, 2015). Hidden curriculums are thought to familiarize students to sociopolitical customs, play a role in their future work relationships with supervisors and coworkers, and prepare them to become members of a diverse working class (García & De Lissovoy, 2013).

Similarly, research has shown that peer relationships play an important role in the educational environment (Kaplan Toren & Seginer, 2015). Perceived positive peer support in middle school is positively linked to academic and social ambitions. Perceived negative peer support is linked to decreased self-esteem and increased depression and behavioral problems (Kaplan Toren & Seginer, 2015). Correspondingly, middle school is a great time for young adolescents during puberty, social, emotional, and intellectual growth to develop the inner strength needed to stand in the face of conflict and make changes (Hansen, 2014).

Social interactions are extremely important to school climate. The teacher-student relationship consists of teachers' mindfulness of and reaction to the academic and emotional needs of the student as well as their regard for the students' perceptions, interests, and motivations (Kaplan Toren & Seginer, 2015). Likewise, a school can be intentional about their efforts to cultivate relationships by creating opportunities to allow students to meet new people and to build better relationships with each other and their teachers (Ferrás & Selman, 2014). Students want teachers to care for them, listen when they speak, and act immediately on items when they are told (Ferrás & Selman, 2014). Positive adult-student relationships have been linked to increased self-confidence and successful intervention programs and to decreased behavioral issues and school violence (Voight et al., 2015). The quality of the relationship has

been shown as a predictor of developmental and academic measures of success at school (Kaplan Toren & Seginer, 2015). Additionally, a decreased student to teacher ratio is associated with fewer behavioral issues and an increased perception of school climate because teachers can effectively supervise student behavior (Voight et al., 2015).

Parental involvement. Another aspect of the social climate is parental involvement. Research varies in the interpretation of parental involvement; thereby making a definition of school climate difficult (Gonzales & Gabel, 2017). Researchers have documented the importance of parental involvement in the school environment using a variety of terms and methods (Lazaridou & Kassida, 2015). A principal's attitude and active support regarding parental involvement sets the tone for how involved parents will become in the educational process (Lazaridou & Kassida, 2015). Parental involvement in the educational process is intellectualized as a multidimensional construct that involves the educational aspirations of the parents, intentions for their children's educational outlook, educational decisions, helping their kids with homework, and knowledge about, and participation in school activities (Kaplan Toren & Seginer, 2015).

Parental involvement includes a variety of parental traditions at home and school related to a student's academic achievement, such as talking about school, communication of what is expected from obtaining an education and its value, and involvement in school activities (Kaplan Toren & Seginer, 2015). Parental involvement is an important aspect of the educational process. Unfortunately, schools in the United States find it complicated to engage parents (Gonzales & Gabel, 2017).

Many forms of parental involvement are not visible or fall outside the traditional definitions of the construct (Gonzales & Gabel, 2017). Therefore, teachers may feel that parents

are not involved in the educational process unless they are able to witness their involvement (Gonzales & Gabel, 2017). Parents have intrinsic and extrinsic motivational factors that are related to what extent they are in their child's educational process (Kaplan Toren & Seginer, 2015). Intrinsic factors include the role of the parent, their feelings about their ability to contribute to their child's success, perception of their invitation to be involved, and their personal circumstances. Extrinsic factors include community enthusiasm, school climate, type or level of the school, access to resources, and school size (Kaplan Toren & Seginer, 2015).

Type of parental involvement changes during the child's educational journey and is affected by the child's perception of their classroom environment (Kaplan Toren & Seginer, 2015). An elementary school student can expect their parent to visit their classroom and interact with teachers and other parents (Kaplan Toren & Seginer, 2015). However, the needs of children change as they grow older (Kaplan Toren & Seginer, 2015). Involvement changes from being present to supporting their autonomy (Kaplan Toren & Seginer, 2015). Researchers believe that few parents remain involved in the educational process through high school, even though it has been proven beneficial (Lazaridou & Kassida, 2015). Culturally and linguistically diverse populations may have different expectations of parental involvement throughout the educational journey that may play a role in these changes (Gonzales & Gabel, 2017). Research shows that parental involvement plays a pivotal role in education (Kaplan Toren & Seginer, 2015). Parental involvement works in tandem with other school contexts and creates educational synergy.

Classroom Climate

The classroom climate refers to interpersonal relationships such as student-teacher relationships, peer relationships, and the academic environment. The classroom climate includes teaching styles, cohesiveness of the classroom, collaboration between students, and

differentiation for students who need assistance (Kaplan Toren & Seginer, 2015). The definition of classroom climate can be broken into three sections: (a) student-teacher relationships, (b) peer relationships, and (c) educational environment (Kaplan Toren & Seginer, 2015).

Trusting student-teacher relationships are important because they allow students to seek help when needed and help teachers identify those who need help (Dymnicki, 2014). Positive peer relationships allow students to help prevent aggressive behavior and show each other how to have positive interactions (Dymnicki, 2014). For example, bullying in the classroom can be indicative of an issue with classroom management (Yoon & Bauman, 2014). Furthermore, discipline at school and in the classroom is an indication of the school policies and the perceptions of the educators and administrators (Baumann & Krskova, 2016). The way the teacher handles each incident helps define students' social behaviors (Yoon & Bauman, 2014). Equally important, the classroom environment comprises a variety of subclimates such as emotional, community, psychological, knowledge, and classroom quality (Kaplan Toren & Seginer, 2015). Students perceive classroom climate as academic, but also personal support from peers and teachers, self-efficacy, and school satisfaction (Kaplan Toren & Seginer, 2015).

The educational atmosphere is comprised of learning styles, task differentiation, collaboration, classroom management, and teacher support and understanding of students' critical thinking skills (Kaplan Toren & Seginer, 2015). The classroom climate affects students' performance, motivation, engagement, and completion of tasks. Furthermore, behavioral issues in the classroom can affect the students' psychological well-being, academic achievement, and social climate (Kaplan Toren & Seginer, 2015). Qualities such as determination and discipline are vital precursors to accomplishment, income, and well-being (McCormick et al., 2015).

Curriculum and instruction. One aspect of the classroom climate is curriculum and instruction. The school environment is a place where students receive knowledge and gain an understanding of society (Lazaridou & Kassida, 2015). The school curriculum “at any given point in time and place is marked by the cultural, political, and economic structure of that particular society” (García & De Lissovoy, 2013, p. 49). Plato (360 B.C.) suggested that a worldview is built on a person’s previous knowledge. Education is seeing things differently, according to Plato. As students’ ideas of truth change, so does their engagement with education. Plato believed that all students have the capacity to learn; however, not all students have the desire to learn. Students must have the desire to learn new paradigms even if doing so means changing long-established frames of reference (Plato, 360 B.C.). Creating the desire to learn in students should be the purpose of education. In the past, the purpose of education was to impart knowledge; however, the future necessitates that teachers help learners make connections to their previous experiences and develop higher-order thinking skills necessary to be successful in the 21st century (Herring et al., 2015).

One way students learn is through teachers’ transmission of knowledge via the curriculum they teach in the classroom (Ramzan, Jalal, & Amjad, 2016; Young, 2013). Teachers dispense knowledge learned by previous generations to the next generation (Young, 2013). A structured curriculum can be used to create changes in society and should be constantly updated to remain relatable to society trends and up to date with global technological advances (Ramzan et al., 2016). The perceptions of school knowledge or curriculum versus everyday knowledge are differentiated in structure and purpose (Young, 2013). Everyday knowledge allows students to create specific but adaptable contexts that help them make sense of the world. The task of curriculum theory “is to identify the constraints that limit curriculum choices and to explore the

pedagogic implications that follow” (Young, 2013, p. 102). Therefore, curriculum developers should answer the question of what knowledge a student should obtain at school (Young, 2013).

The problem is that not everyone will think the same way, nor will everyone apply their knowledge the same way (Young, 2013). A curriculum is built to walk students through the learning process and produce the same learning outcomes using various methods. Curriculum is important as it guides the student, but it is also important to how the teacher implements the material in the classroom (Young, 2013). Curriculum must be carefully laid out with specific objectives so that it is easy to follow and implement (Ramzan et al., 2016; Young, 2013). If curriculum developers are lax in their processes, they could have a curriculum that is unusable in the classroom or an audience that is hesitant to accept their changes because of irrelevant material (Ramzan et al., 2016; Young, 2013). Developers must ask themselves a variety of questions to determine (a) their goals, (b) how they want the curriculum to be received, and (c) what specific steps need to be taken to achieve their goals (Young, 2013). To ensure the fidelity in teaching the curriculum to students, teachers should be trained on effective implementation processes and involved in the construction of the curriculum, as they know what works best in the classroom (Ramzan et al., 2016).

Teaching effectively is one of the many expectations placed on schools (Gulsen & Gulenay, 2014). The literature from educational research has shown that effective teachers provide a quality education (Kahraman, 2014). Effective teaching can be defined as “the kind of teaching that is going to lead to students’ success in the learning process” (Herring et al., 2015, p. 164). Effective teaching falls into four dimensions of responsibility organization. These dimensions include (a) the details of lesson planning; (b) classroom management, which involves encouraging and sustaining student learning while creating a successful learning environment;

(c) flexibility, engaging students through a variety of learning styles; and (d) evaluation, the assessment of student achievement (König et al., 2015). Teachers must use cognitive processes to help them be successful as they recall information, understand the breadth of the topic they are teaching, and problem solve. Student-teacher interactions determine the practical explanation of topics determined by instructional purpose and rationale (König et al., 2015). Teachers and students collaborate to explore and adapt to the ever-changing technological advances and opportunities for learning (Herring et al., 2015).

Racial Climate

Another aspect of school climate is racial climate. Researchers and policymakers at the U.S. Department of Education have taken an interest in school climate (Voight et al., 2015). One reason for concern about school climate is the adverse effects on students' academic achievement (Connell et al., 2015). These achievement gaps could be caused by community segregation and racial inequalities within the school (Voight et al., 2015). Unfortunately, many of these race-specific gaps are overlooked because of the general racial classification categories (Connell et al., 2015). Researchers suggest that race plays a part in how a student perceives different aspects of school climate such as safety, support, and relationships (Voight et al., 2015). Culturally and linguistically diverse populations may require different pedagogical practices and strategies to increase student achievement (Gonzales & Gabel, 2017). These pedagogical practices and strategies may affect the willingness of parents to be involved in the educational process (Gonzales & Gabel, 2017).

Research shows that students of color have lower academic achievement and have more disciplinary actions than their peers (Voight et al., 2015). Cultural misunderstandings in the classroom may play a role in lower academic achievement and decreased perceptions of school

climate (Gonzales & Gabel, 2017). The educational system plays a role in society and “education inequity is a persistent reality of American culture” (Voight et al., 2015, p. 253). Students of color are less likely to approach their teachers when aggressive behavior occurs and are more likely to have a lower perception of school climate than their peers do (La Salle et al., 2016; Voight et al., 2015). Research shows that students of color have a lower perception of school safety and positive student-teacher relationships, allowing them to have a different perception of school than their Caucasian peers (Voight et al., 2015).

Although much research has been conducted on school climate, there is no definitive definition of it (Jain et al., 2015; Momna & Anis-ul-Haque, 2014). As each layer of the framework is unraveled, a new construct to research is revealed (Jain et al., 2015; Momna & Anis-ul-Haque, 2014). If there is a change in any construct, it affects the other constructs either positively or negatively. These constructs and subclimates overlap to create a tightly interwoven picture of a school and its school climate (Jain et al., 2015; Momna & Anis-ul-Haque, 2014).

The Effects of the Subclimates of School Climate in Education

Current educational reform aims for clear expectations of what students are expected to learn through consistent student assessment of achievement (Tschannen-Moran & Gareis, 2015). Accordingly, educators are held responsible for what happens in the classroom and for student learning outcomes (Tschannen-Moran & Gareis, 2015). School leaders focus on why things are happening as they try to balance the demands of policymakers and stakeholders (Snyder, 2015). The focus has been on the *what* and *how*, defined by the increase in standardized testing. However, the increase in standardized testing has created circumstances that are deemed counterproductive to the original principles of the educational system (Snyder, 2015).

School climate is important because it has been linked to positive characteristics and a healthy functioning school (Momna & Anis-ul-Haque, 2014). The strengths and weaknesses of school climate can be measured by assessments. School effectiveness is normally the part of school climate that is routinely assessed (Momna & Anis-ul-Haque, 2014) and is influenced by principal and teacher policies and a healthy school climate (Gulsen & Gulenay, 2014).

A positive school climate is characterized by a school environment that makes students feel emotionally and physically safe, part of the school community, that adults in the school respect them, care about them, and have high expectations for their wellbeing and success, and that they have opportunities to provide input in how things work at the school. (Voight et al., 2015, p. 253)

School climate affects students, teachers, and administrators; therefore, their perceptions and experiences are important (Momna & Anis-ul-Haque, 2014). A positive school climate is linked to increased academic achievement and decreased disciplinary action (Voight et al., 2015). Increased grade point averages, standardized test scores, and reading and writing levels are also associated with a positive school climate (McCormick et al., 2015).

Schools with the lowest school climates can benefit more from interventions that focus on social interactions (McCormick et al., 2015). Students in Ferráns and Selman (2014) study suggested that schools create social awareness by activities such as educational media for conflict resolution, a focus group on bullying, publicly rewarding students for intervening in bullying situations, and mentoring student leaders. Social practices influence individuals and contexts such as customs, relationships, and interactions (McCormick et al., 2015). Stakeholders support the use of school-based social-emotional learning programs as they not only develop those skills but also help increase academic achievement. A variety of programs focus on the

school and home settings, while others employ classroom-based curriculum (McCormick et al., 2015). Social-emotional learning programs target reasoning and emotional and behavioral skills, such as learning to think critically in decision making and understanding and respecting the views of others. These skills allow students to be engaged in instructional activities and the learning environment (McCormick et al., 2015).

A school should build an awareness and respect for all racial and cultural backgrounds using instructional materials that reflect various cultures, make efforts to close any perceived achievement gaps, and support diversity in the classroom (Voight et al., 2015). Specifically, interventions designed to target improving respect for diversity have been shown to improve the perception of school climate by increasing feelings of safety, connectedness, positive student-adult relationships, and academic engagement (Voight et al., 2015). As an illustration, schools with poor students have lower ratings of school climate because these school settings are associated with more violent behaviors (Voight et al., 2015). Likewise, children raised in destituteness, which is typically correlated with racial or ethnic minority status in inner-city neighborhoods, show more emotional and social difficulties (McCormick et al., 2015).

However, there is a push for educational reforms in these areas to increase social-emotional and scholastic maturity (McCormick et al., 2015). Notably, Caucasian students show less prosocial behavior when in an educational setting with a larger number of students of color (Voight et al., 2015). The school location may play a part in the perception of school climate by different races. Urban and suburban schools have been shown to have a higher rate of behavioral problems and feel less safe than rural schools. These differences may be due to socioeconomic disparities between the races and the schools' teacher-student ratio (Voight et al., 2015).

Ferrás and Selman (2014) found that students value safety, order, care, and empowerment in their school environment. According to the data collected from interviews, students value order, which is created by establishing clear discipline policies, placing teachers in places where bullying frequently occurs, increasing supervision, and creating preventative measures (Ferrás & Selman, 2014). However, Veenstra, Lindenberg, Huitsing, Sainio, and Salmivalli (2014) reported that teachers are ineffective at reducing bullying because they do not perceive it the same as students. Research has shown that victims of bullying did not feel safe at school, suffered from depression, internalize problems, have low self-esteem, and poor academic achievement (Baly et al., 2014; Ferrás & Selman, 2014). For example, at least 28% of public school students reported being bullied at school compared to 21% of private school students (National Center for Education Statistics, 2014). However, females show more social anxiety and are more prone to social bullying such as name calling than are males (National Center for Education Statistics, 2014).

School life is contextual, ambiguous, and complex (Riedler & Eryaman, 2016). The school and classroom activities are in a constant state of transformation comprised of complex constructs that illuminate the educational experience. The school climate imitates the customs, ambitions, principles, community, instruction and learning practices, and organizational structures of the school environment (McCormick et al., 2015). Comprehending school climate can help administrators understand social processes on the macro and micro levels (McCormick et al., 2015). Working conditions provide a detailed depiction of school climate and are deemed positive when the environment is cohesive. Subsequently, teacher working conditions, interpersonal relationships, and feelings of belongingness and esteem are aspects of a positive school climate (Momna & Anis-ul-Haque, 2014).

Teacher Working Conditions

Although school climate is typically measured from the students' perspective, teachers' perception of school climate is important (Huang et al., 2015). Teachers can give a distinct perspective as they see elements of the situation that students do not see. Teachers and students do not rate overall climate the same, but the teacher perspective is frequently missed in school climate surveys (Huang et al., 2015).

Over 50% of preservice teachers leave the profession because they are not prepared for the emotions and stress of the position (Chesnut & Cullen, 2014). Early teacher attrition has risen over the past 40 years, creating a need to understand teacher development and education. Teacher working conditions look at teachers' perception of school climate and focus on teacher-driven actions such as commitment, job satisfaction, and well-being (Chesnut & Cullen, 2014). Teachers' perceptions of working conditions show their evaluation of school customs, viewpoints, principles, and methods (Pogodzinski, 2014). Respectively, these areas have an influence on teachers' personal effort, commitment, and career development (Pogodzinski, 2014). Working conditions influence attitude, performance, and turnover through intrinsic and extrinsic factors and are characteristic of the entire school (Pogodzinski, 2014).

Teacher Motivations

Commitment to teaching, defined as the motivational drive to enter the field, is strongly predicted by emotional intelligence (Chesnut & Cullen, 2014). Teachers' motivations stem from beliefs about themselves, their job expectations, and their emotional intelligence and resiliency. Commitment helps fulfill goals and provides an improved view of work (Chesnut & Cullen, 2014). People who have productive thoughts and emotions in stressful times keep a positive outlook because they have high emotional intelligence. People with high emotional intelligence

are able to deconstruct situations and contexts using their emotions to guide their thoughts and actions. People with high emotional intelligence understand their emotions in a manner that enables them to grow intellectually. More importantly, teachers can evaluate classroom events, which helps them grow intellectually, change an environment to promote emotional well-being, and notice behavior cues and adjust accordingly (Chesnut & Cullen, 2014).

The definition of working conditions includes salary, chance for career advancement, school resources, behavioral issues, and school leadership (Pogodzinski, 2014). Teachers choose to work at specific types of schools based on their preferences such as location, school status, district standing, student achievement records, and working conditions (Pogodzinski, 2014). Teacher salary, availability of resources, class sizes, professional development, and leadership also play a role in whether a teacher stays or leaves the profession (Adamson & Darling-Hammond, 2012). This is particularly evident in areas with low-income and minority students as those teachers do not feel adequately supported. Schools with the least advantageous working conditions have underqualified teachers with less teaching experience, certifications, training, and lower student test scores (Adamson & Darling-Hammond, 2012; Pogodzinski, 2014). Unfortunately, schools that cannot keep adequate, qualified staff are often left with the less effective novice teachers who have no loyalty to the school or profession; thereby perpetuating turnover (Pogodzinski, 2014).

Teacher Well-being

Research has shifted from negative reflections of well-being to more positive outcomes (Cherkowski & Walker, 2016). Well-being is a broad term that encompasses emotional, psychological, and social elements such as positive relationships and personal growth. These elements have recently been recategorized in psychological research as *flourishing* but the

research does not typically focus on the school environment or the workplace (Cherkowski & Walker, 2016). Flourishing has a more positive focus than previous research and is deemed the opposite of *sinking* with a focus on happiness. Previous research was focused on a deficit such as the lack of health (Cherkowski & Walker, 2016). Using the deficit approach, teachers with psychological issues are more likely to have chronic problems and burnout (Borrelli et al., 2014). Research on burnout, frequently seen as the opposite of engagement at work, was previously focused on the relationship between the provider and beneficiary and not necessarily between someone and their job (Mojsa-Kaja, Golonka, & Marek, 2015). Physical illnesses are more prevalent in those suffering from burnout (Mojsa-Kaja et al., 2015).

Teachers' well-being is instrumental to a quality education for students (Wong, 2015). Well-being is influenced by workspace, classroom size, staff areas, parents, and coworkers (Wong, 2015). Psychological well-being is negatively influenced by a high stress lifestyle, which can affect physical health as well (Chesnut & Cullen, 2014). Research has shown that workspace, including lighting and noise level, affects mood, stress level, thoughts about work, memory, performance, and health (Wong, 2015).

The pleasure teachers derive from teaching affects student achievement and behaviors (Kahraman, 2014). Likewise, a predictor of job satisfaction is staffing and work hours (Wong, 2015). Teachers are willing to work long hours because they are dedicated and self-directed. However, job satisfaction and mental health can be indicated by the perception of the work environment and attributed to specific work environment dynamics (Wong, 2015). Salary is the most frequently mentioned element of job satisfaction but other elements, such as the time needed to complete workload, classroom environment, collaboration, and support, play a factor (Chesnut & Cullen, 2014). To facilitate a positive professional environment, "School managers

and policymakers may need to establish and enforce policies that maintain stable staffing and specify an optimal period of work hours for teachers” (Wong, 2015, p. 494). However, long hours are needed to accomplish everything that needs to be done and upsets the work-life balance, which increases the stressfulness of the position (Wong, 2015).

Professional Environment

A positive professional climate is critical to a positive school climate (Kim et al., 2014). An environment that flourishes is associated with collaboration toward a common goal and a passionate team atmosphere (Cherkowski & Walker, 2016). Job satisfaction, staff retention, and work-life balance are increased in a positive school climate (Momna & Anis-ul-Haque, 2014). Additionally, teachers’ personal growth and knowledge, professional and organizational commitment, belief in positive academic outcomes, and retention are affected by a positive school climate (Momna & Anis-ul-Haque, 2014). Professional relationships within the school reflect the school culture, opportunities for collaboration, and shared accountability (Pogodzinski, 2014). These interpersonal interactions also speak to the school norms, principles, and established professional customs (Pogodzinski, 2014). These relationships influence the staff perceptions of working conditions, practices, and career development (Pogodzinski, 2014). Positive perceptions of working conditions express teachers’ commitment to do their best, career development, and desire to continue teaching (Pogodzinski, 2014). However, large teacher workloads, especially for novice teachers, are linked to stress, self-efficacy, job satisfaction, and career development (Pogodzinski, 2014).

Cherkowski and Walker (2016) found that educators create emotional bonds when they are allowed to collaborate and work toward a common goal such as helping their students learn and grow. Novice teacher orientation should allow professional development and an opportunity

to develop interpersonal relationships that strengthen their desire to teach and give them a chance to collaborate with colleagues (Pogodzinski, 2014). Unfortunately, novice teachers have the same expectations placed on them as veteran teachers (Pogodzinski, 2014). For instance, Pogodzinski (2014) studied teachers in four states with two or fewer years of experience and found that 44% had the same expectations as veterans, 52% felt that they did not have adequate time for planning and preparation, and 36% said they had a heavy workload (Pogodzinski, 2014). Yet, novice teachers have harder teaching assignments that decrease their ability to be effective in the classroom (Pogodzinski, 2014).

Teachers have been given more administrative duties to increase accountability, but these responsibilities and continued education reforms have led to an overwhelming workload (Pogodzinski, 2014). In flourishing environments, educators want to have a sense of leading together and improving their schools (Cherkowski & Walker, 2016). Teacher education programs help teachers become effective by introducing them to the skills necessary to teach students (Chesnut & Cullen, 2014). Novice teachers often receive resources and support from veteran teachers who help them address their struggles and fears of the position. School systems spend thousands of dollars introducing teachers to the profession but reviews are mixed on the effectiveness of the programs to increase retention (Pogodzinski, 2014).

The accessibility of human and physical resources is also related to working conditions (Pogodzinski, 2014). Resource accessibility affects the ability of teachers to complete their assigned workload in and out of the classroom. Research suggests that resource availability influences effectiveness and career development (Pogodzinski, 2014). A better understanding of how schools and districts provide instructional support may help allocate resources to policies that hold them accountable and increases student achievement (Hill et al., 2015).

Less stress is associated with accessibility to adequate resources, increased self-efficacy, and job satisfaction (Pogodzinski, 2014). Self-efficacy is defined as everyday experiences that influence the perception of self and confidence in the ability to finish projects successfully (Chesnut & Cullen, 2014). People with high self-efficacy believe they have the ability, competence, and knowledge to finish projects. Kahraman (2014) found that teachers with high self-efficacy are more satisfied with their jobs.

Interpersonal relationships affect resource and support access as more relationships with colleagues allow teachers to collaborate and gain insight into what has worked in the past (Pogodzinski, 2014). These relationships allow school customs to be developed and expectations to be communicated; thereby affecting, to some degree, teachers' perceptions of working conditions. As an illustration, teachers form subgroups in the school environment that may have separate expectations from the norm; thus creating differing perceptions of working conditions. In turn, these expectations and perceptions affect the method and intensity of support given within the group (Pogodzinski, 2014). Notably, mentoring is one form of a human resource that allows teachers to share knowledge, skills, and best practices (Pogodzinski, 2014). The quality of the mentorship plays a role in both personal and professional relationships. However, the role of the principal is still important because principals evaluate and improve teaching skills using a systematic approach (König et al., 2015). Improved teaching methods are obtained through deliberate efforts and reflection on teaching (König et al., 2015).

Teaching experience is a significant factor in indicating the perceived quality of teacher working conditions (König et al., 2015). Novice teachers often experience helplessness and instability because of their unfamiliarity with the school environment and expectations (Riedler & Eryaman, 2016). Veteran teachers have taught the curriculum details frequently. The

repetitive recollection enhances their knowledge and allows them to add new information easily (König et al., 2015). Veteran teachers have a holistic perception of the information because they modernize the context of instruction and use a variety of problem-solving strategies. In contrast, novice teachers experience difficulties constructing and expressing their thoughts (König et al., 2015). Novice teachers who learned from a scientific viewpoint in their teacher education programs must adjust their paradigms to correspond with the current multifaceted and vigorous education phenomena (Riedler & Eryaman, 2016). Teacher education programs may have presented the classroom environment in a simplified way to help them learn, but the culturally and linguistically diverse classroom environment is more complex. Few novice teachers are as intuitive and able to tailor their information to their students as veteran teachers (König et al., 2015). The novice teachers' knowledge of the classroom environment may be inadequate, forcing them to adapt swiftly (Riedler & Eryaman, 2016).

Teacher Leadership

A teacher plays a vital role in facilitating the learning process and is responsible for helping students learn the material (Riedler & Eryaman, 2016). Their instruction in the classroom determines how well the curriculum will be presented (König et al., 2015). However, teachers have many responsibilities inside and outside the classroom (Chen, 2015; Kilinc, 2014). Teachers are being asked to take on more leadership responsibilities in their schools as stakeholders have focused on educational reform in recent years (Musselman et al., 2014).

Teacher leadership despite its complexity is defined as positively improving practices inside and outside the classroom and collaboration with a focus on providing an excellent teaching and learning environment (Kilinc, 2014). A school that encourages teacher leadership “provides ownership to all teachers for all students learning” as teachers become responsible for

the education of the entire school instead of just their own classroom (Musselman et al., 2014, p. 22). Likewise, professional development has been linked to improving and sustaining change and improving student achievement, one of the reasons teacher leadership is a popular research topic (Kilinc, 2014).

Teacher leaders have a shared purpose that allows them to learn and collaborate and are keys to high-performing schools (Musselman et al., 2014). Teacher leader use their knowledge, talents, and capabilities to expand the learning environments (Kilinc, 2014). Teacher leadership has two components: (a) institutional—improving the teaching and learning environments; and (b) professional development—helping themselves and others improve their skills and collaboration to improve student achievement. Institutional development designs, executes, and assesses effective teaching practices that increase student achievement. Teacher leaders can become both informal and formal change agents in environments that support this type of leadership and collaboration (Kilinc, 2014).

Teacher leaders have been the focus of recent research as educational reform focused on increased teacher participation in administrative roles allows them to influence change and be involved in decision-making processes (Musselman et al., 2014). In the past, educational research focused on improving practices with an emphasis on teacher leadership as it enhances professional development (Kilinc, 2014). Research has found four areas that increase the effectiveness of teacher leaders: shared leadership, authority, trust, and time (Musselman et al., 2014). Research has shown that teachers enjoy leadership responsibilities because it leads to increased job satisfaction and commitment (Pogodzinski, 2014). Specifically, teachers in leadership can become catalysts of teaching and learning, mentors in the school environment, and experts in their areas (Kilinc, 2014). By participating in the decision-making processes,

leading, building positive interpersonal relationships, and initiating professional development, teachers can improve their school environment. Teachers' perceptions of themselves help them discern their ability to increase learning, hold themselves accountable for disappointments, embrace change, and help others develop professionally (Kilinc, 2014).

Teacher leadership is reinforced when school leadership shows their support, communicates effectively, builds trustworthy relationships, and builds a school culture, structure, and context for teacher leadership to flourish (Kilinc, 2014). Teachers' relationships with school leadership influences their desire to be in leadership roles where communication and administrative skills are crucial, especially if their visions and perceptions of the school do not align (Kilinc, 2014). Positive interpersonal relationships between teachers promote more open and continued discussion on behavioral issues in the classroom, thus promoting behavioral management at the school level (Dymnicki, 2014).

Teachers' classroom performance is enhanced by their knowledge and skills (König et al., 2015). Professionalism displays teachers' willingness to collaborate, to go beyond for students, and to make informed decisions. Professionalism has been found to augment student achievement (Tschannen-Moran & Gareis, 2015). Teachers have specialized expert knowledge and possess deep knowledge of principles, theories, and procedures that enhance the knowledge obtained by students (Tschannen-Moran & Gareis, 2015). König et al. (2015) reported that, "Teacher competence is regarded as a multidimensional construct, consisting of content knowledge, pedagogical content knowledge, and general pedagogical knowledge as well as of perception, interpretation, and decision-making skills" (p. 332). Teachers use their knowledge to make decisions on what needs to happen in the classroom and how to successfully invest in their students. Subsequently, the climate of the classroom and students' perceptions of the teacher and

their willingness to support them plays a role in how students view their school climate (Ferrans & Selman, 2014). Personal achievements, along with school and academic success, are affected by teachers' perceptions of school climate (Momna & Anis-ul-Haque, 2014). A negative perception of school climate is associated with exhaustion and mental health issues. Therefore, it is important to know how a teacher perceives school climate (Momna & Anis-ul-Haque, 2014).

School Leadership

Effective leadership is key to school improvement and student achievement (Kilinc, 2014) and "the principal plays a crucial role in the formation of the school climate, which, in turn, has a positive effect on the school's efficacy" (Gulsen & Gulenay, 2014, p. 99). However, research has shown that leadership centered on the principal creates obstacles to teaching and learning (Kilinc, 2014). This is referred to as the social exchange theory of leadership where roles and responsibilities are clearly delineated within the school environment. Although school leadership research primarily focuses on principals, it should also focus on collaboration and shared responsibilities (Kilinc, 2014). Principals, teachers, and parents who collaborate form a powerful leadership force that increases student achievement (Musselman et al., 2014).

Much of the success of a school is based on administrators and the expectation that they will increase academic achievement and growth (Quin, Deris, Bischoff, & Johnson, 2015). This places conflicting demands on school leadership as both decision makers and people in authority (Kilinc, 2014). Principals influence educational standards and lead the charge to improve academic achievement (Fuller, Hollingworth, & Liu, 2015; Jain et al., 2015). The leadership of a school not only affects student outcomes but it also affects the professional climate of the school and teacher job satisfaction.

The quality of school leadership influences novice teachers, directly affecting assigned work, resources, and evaluations (Pogodzinski, 2014). Administrator support and the quality of that support affects teacher working conditions (Pogodzinski, 2014). Teachers who are overloaded by administrative and teaching duties, do not have sufficient administrative support, or are displeased with the resources in their classroom have a lower perception of school climate (Momna & Anis-ul-Haque, 2014). Therefore, school leaders should understand how teachers perceive their working conditions and create an organizational environment that promotes commitment, collaboration, and effectiveness (Pogodzinski, 2014).

Principals with a clear vision garner more community support (Garza et al., 2014). Newer instructional leadership practices embrace a collaborative, democratic model to enhance student achievement and meet students' diverse needs (Kilinc, 2014). Leadership can be defined as "a relationship between those who aspire to lead and those who choose to follow" (Posner, 2015, p. 888). Supportive principals are a valuable part of school climate because teacher support positively influences the staff (Momna & Anis-ul-Haque, 2014).

Many leadership styles influence interpersonal interactions within the school and shape school climate. Transformational leadership consistently inspires a shared vision, models the way, challenge the process, enables others to act, and encourages the heart (Posner, 2015). Research suggests that instructional school leaders who challenge the process and inspire a shared vision are the two leadership practices that are statistically different between administrators at high-and low-performing schools (Quin et al., 2015). Using transformational leadership practices increases an administrator's effectiveness and moves the school toward high performance (Quin et al., 2015). Collegial leadership is perceived as supportive and egalitarian because it focuses on interpersonal relationships and the shared vision of the stakeholders

(Tschannen-Moran & Gareis, 2015). This type of leadership acknowledges divergent opinions, decentralizes the decision-making process when needed, and draws on stakeholders' collective wisdom. Instructional leadership centers on core tasks such as curriculum development, instructional practices, and improving learning outcomes by strengthening teachers' instructional practices (Tschannen-Moran & Gareis, 2015).

Although administrators are responsible for high-level decisions such as sharing the vision of the school while teachers are responsible for implementing instructional practices that maximize learning outcomes, both contribute to the school climate (Tschannen-Moran & Gareis, 2015). Administrators, specifically principals, should be trustworthy, honest, have integrity, be authentic, and be able to lead and listen to the opinions of others; thereby creating trusting relationships and allowing effective communication with stakeholders (Tschannen-Moran & Gareis, 2015). Administrators should also be resilient, focused, and ethical (Garza, Drysdale, Gurr, Jacobson, & Merchant, 2014). Unfortunately, administrators are not being prepared for the everyday realities of the school environment leaving them unequipped to equalize the demands of accountability and the purpose of education (Snyder, 2015). Recent efforts in accountability stemming from various laws and government regulations have called for the increase of evaluation of school leadership through a variety of methods such as evaluation of leadership responsibilities and the resulting student outcomes (Fuller et al., 2015). Research shows that principals who demonstrate collegial leadership, instructional leadership, and trustworthy behavior are more likely to have teachers who have faith in them to create an environment with high academic standards (Tschannen-Moran & Gareis, 2015). Moreover, principal leadership affects teachers, what happens in the classroom, student achievement, and is an unseen element in school climate (Tschannen-Moran & Gareis, 2015).

Summary

A number of stakeholders are involved in creating a positive school climate where students feel comfortable learning and are successful academically (Huang et al., 2015; Musselman et al., 2014). Although school climate has been researched in the past, each study has added a new layer to the research literature and added new constructs to contemplate (Kim et al., 2014). As school structure has changed and been reformatted over the years, social interactions between students have transformed (Gomez et al., 2012). Administrators need to carefully construct an environment where students feel safe (Kilinc, 2014; Pogodzinski, 2014). A positive school climate is built through repeated assessment and intentionality (Pogodzinski, 2014; Tschannen-Moran & Gareis, 2015). Administrators, teachers, parents, and students must understand the rules and the vision for the school (Pogodzinski, 2014; Tschannen-Moran & Gareis, 2015). The school climate constructs should be clearly defined for each school so measures are in place to monitor them (Tschannen-Moran & Gareis, 2015).

There is little research from the perspective of teachers on their perceptions of their working environment. The research on school climate and its constructs are similar (Huang et al., 2015). Depending on the research question, the same issues are tackled from different perspectives (Huang et al., 2015). However, it all leads to the same conclusion—a positive school climate is better for all stakeholders (Kim et al., 2014; Momna & Anis-ul-Haque, 2014). Teachers are willing to stay with the profession and its changing demands if they have a positive perception of their working environment (Chesnut & Cullen, 2014; Wong, 2015). Teachers and administrators are keys to the success of a school; therefore, their perceptions of their working environment are critical (Pogodzinski, 2014; Tschannen-Moran & Gareis, 2015). Research has shown that the negative effects of the working environment have led to increased teacher

turnover (Chesnut & Cullen, 2014; Pogodzinski, 2014; Wong, 2015). However, the problem is that few schools are actively seeking to create a positive working environment (Chesnut & Cullen, 2014; Kaplan Toren & Seginer, 2015).

CHAPTER THREE: METHODS

Overview

The purpose of this study was to gain insight into how teachers and principals perceive the climate in their school. Although no questionnaire fully assesses school climate, many surveys have a common theme that includes discipline and the quality of interpersonal relationships (Huang et al., 2015). The researcher used an ex-post facto causal-comparative research design to evaluate principal and teacher perceptions of working conditions using the North Carolina Teacher Working Conditions Survey (NCTWCS).

Design

An ex-post facto causal-comparative survey research design was used to determine if a difference existed between principal and teacher perceptions of working conditions in North Carolina. Causal-comparative research is used to identify cause and effect relationships with naturally occurring groups to determine whether groups differ on the dependent variable (Gall, Gall, & Borg, 2007). The independent variables are principals and teachers. The dependent variables are the principal and teacher perceptions of eight constructs contained in the NCTWCS. The comparison groups have established meanings, which strengthens the use of a causal-comparative design over a correlational design (Gall et al., 2007). Although the ex-post facto causal-comparative survey design does not lead to strong conclusions, the design can explore a variety of casual factors (Gall et al., 2007).

Research Question

RQ: Are there statistically significant differences in perceptions of working conditions between principals and teachers as measured by eight scales of the North Carolina Teacher Working Conditions Survey?

Null Hypothesis

H₀: There are no statistically significant differences in perceptions of working conditions between principals and teachers as measured by eight scales of the North Carolina Teacher Working Conditions Survey.

Participants and Setting

The participants for this study are a random sample of North Carolina principals and teachers who responded to the NCTWCS in March 2016. All 119,177 school-based licensed educators in the state had the opportunity to participate voluntarily in the survey (New Teacher Center, 2018). The 2016 NCTWCS, administered to all North Carolina public school teachers, staff, and administrators, had 101,846 responses, for a 85% response rate. Educators in all 115 school districts and charter schools were invited to participate (New Teacher Center, 2018).

North Carolina is an ideal setting because the inhabitants of the state create a variety of schools, districts, and demographics such as ethnicity, socioeconomic backgrounds, and years of service. North Carolina had 2,592 public and charter schools, with 181,063 full-time personnel and 1,537,643 students during the 2015–2016 FY (North Carolina Public Schools, 2016). Ethnic groups listed as American Indian, Asian, Hispanic, Black, White, Pacific Islander, and other were part of the school system (North Carolina Public Schools, 2016). The survey collected the school name but no questions were asked about ethnicity, gender, or age of the educators (Kraft & Papay, 2014). The 2016 data downloaded from the New Teacher Center included 101,846 cases. A breakout of the data is presented in Table 1.

Table 1

Characteristics of Database (n = 101,846)

Characteristic	<i>n</i>	%
Position		
Teacher	89,729	88.1
Principal	1,751	1.7
Assistant principal	2,121	2.1
Other education professional	8,245	8.1
Grade level		
Elementary (PK–5)*	40,454	39.7
Middle school (6–8)	17,901	17.6
High school (9–12)	25,699	25.2
Other grade configurations	17,792	17.5
Type of school		
Regular	97,936	96.2
Special education school	423	0.4
Vocational school	60	<0.1
Other/alternative school	1,150	1.1
No response	2,287	2.2
Enrollment		
13–500	30,005	29.5
501–750	30,492	29.9
751–1000	17,519	17.2
1001–2775	21,543	21.2
No response	2,287	2.2
Years of experience		
First year	5,454	5.4
1–3	11,260	11.1
4–6	12,993	12.8
7–10	15,546	15.3
11–20	34,880	34.2
More than 20 years	21,430	21.0
No response	286	0.3

* *Note.* Elementary grade configuration contained any school with lower grades ranging from PK to Grade 3 and the highest grade at Grade 5. Therefore, schools with PK–5, KG–5, or 1–5, 2–5, and 3–5 grade levels were considered elementary schools.

Instrument

The NCTWCS was distributed for the first time in 2002 as part of the Governor’s Teacher Working Conditions Initiative and is conducted biennially (New Teacher Center, 2014). Eric Hirsch at New Teacher Center developed the survey to learn teachers’ opinions of the social, cultural, and physical school environment (Kraft & Papay, 2014). The anonymous survey

was created to assess the working conditions at the school, district, and state levels (New Teacher Center, 2016). New Teacher Center conducts the Teaching, Empowering, Leading, and Learning Survey, frequently referred to as TELL, in multiple states and submits an analysis of the results for review (New Teacher Center, 2016). New Teacher Center helps state and district leaders analyze educator perceptions of teaching and learning conditions in their schools and districts (New Teacher Center, 2016). The use of the TELL survey has increased in use and response rates since it was first distributed (Kraft & Papay, 2014; New Teacher Center, 2014). In North Carolina, the instrument is referred to as the North Carolina Teacher Working Conditions Survey.

The survey was designed to incorporate eight constructs tied to outcomes such as teacher retention and student learning. The eight constructs are use of time in school, school facilities and resources, community support and involvement, managing student conduct, teacher leadership, school leadership, professional development, and instructional practices and support (New Teacher Center, 2014). The survey uses a Likert-type rating that ranges from 1 (*strongly disagree*), 2 (*disagree*), 3 (*agree*), to 4 (*strongly agree*). Respondents were also able to select a *do not know* option (New Teacher Center, 2014). Table 2 contains a description of the eight constructs and sample items for each scale.

The TELL survey has been administered in Maryland, Colorado, Massachusetts, Tennessee, Kentucky, Vermont, Delaware, Ohio, New Mexico, North Carolina, and Oregon (New Teacher Center, 2016). North Carolina has the longest administration of the survey and has at least four more administrations than any other state (New Teacher Center, 2014). During the 2013–2014 school year, 680,016 school-based licensed educators in 11 states had the opportunity to take the TELL survey (New Teacher Center, 2014).

Table 2

Items on the 2016 NCTWCS Scales

Scale	Description	# of items	Sample items
Use of school time	Available time to plan, collaborate, provide instruction, and eliminate barriers to maximize instructional time during the school day	7	Teachers are allowed to focus on educating students with minimal interruptions. The non-instructional time provided for teachers in my school is sufficient.
Facilities and resources	Availability of instructional, technology, office, communication, and school resources to teachers	10	Teachers have access to reliable communication technology, including phones, faxes, and email. Teachers have sufficient access to instructional technology, including computers, printers, software, and Internet access.
Community support and involvement	Community and parent/guardian communication and influence in the school	8	Parents/guardians know what is going on in this school. This school does a good job of encouraging parent/guardian involvement.
Managing student conduct	Policies and practices to address student conduct issues and ensure a safe school environment	7	School administrators consistently enforce rules for student conduct. School administrators support teachers' efforts to maintain discipline in the classroom.
Teacher leadership	Teacher involvement in decisions that impact classroom and school practices	7	Teachers are relied upon to make decisions about educational issues. Teachers are trusted to make sound professional decisions about instruction.
School leadership	Ability of school leadership to create trusting, supportive environments and address teacher concerns	19	The school leadership consistently supports teachers. Teacher performance is assessed objectively.
Professional development	Availability and quality of learning opportunities for educators to enhance their teaching	13	Professional development offerings are data driven Teachers are encouraged to reflect on their own practice.
Instructional practices and support	Data and support available to teachers to improve instruction and student learning	10	Teachers collaborate to achieve consistency on how student work is assessed. Teachers require students to work hard.

Data from 286,835 educators in 11 states were used for an external analysis by Swanlund (2011). The external validity testing helped increase the statistical stability of the survey by

making changes, such as removing the 6-point scale and replacing it with a 4-point scale (New Teacher Center, 2014). The external analysis of each subscale established that Rasch reliability coefficients range from .80 to .98 (New Teacher Center, 2014). The eight scales produced internal reliability alpha coefficients that ranged from .86 to .96 (New Teacher Center, 2014). The New Teacher Center (2014) reported that the external analyses by Swanlund confirmed that the survey “offers a robust and statistically sound approach for measuring teaching and learning conditions” (p. 3).

The anonymous online survey was administered in 11 states during a 4-week window in March 2016. Educators used an anonymous password to enter the survey to ensure everyone only took the survey one time. A school or district had to have a 40% response rate to have its results published online. Almost 400,000 ($n = 377,203$) educators responded in 11 states, for a response rate of 55% (New Teacher Center, 2014).

Procedures

The researcher submitted the approved proposal to the Liberty University Institutional Review Board (IRB) for their approval to start the research process. After the Liberty University IRB approval letter was received, the researcher contacted New Teacher Center to obtain the raw data from the 2016 administration of the survey in North Carolina. The data were entered into SPSS for analysis.

Data Analysis

A multivariate analysis of variance (MANOVA) was used to compare the teacher and principal responses to the eight scales selected from the NCTWCS. The alpha level was set to $p = .05$ to reduce Type I error (Gall et al., 2007). The use of the MANOVA assumes a normal distribution of the population, homogenous population variances, and variables that are

independent of each other (Green & Salkind, 2011). Histograms and the Kolmogorov-Smirnov test were used to assess the normality of the dependent variables for the two groups (teachers and principals). However, the Central Limit Theorem implies that the sample mean vectors are going to be approximately multivariate normally distributed regardless of the distribution of the original variables. In general, MANOVA is not sensitive to violations of the assumption of normality (Eberly College of Science, 2018). In addition, if the sample sizes of the two groups are equal there is little sensitivity to the violation of the assumption of homogeneity of variance-covariance matrices and MANOVA can be used as usual (Eberly College of Science, 2018).

The sample size required to test the differences between teacher and principal perceptions on one scale of the NCTWCS is 86 in each group, based on a GPower 3.1 power analysis (Faul, Buychner, Erdfelder, & Lang, 2014) using a medium effect size of 0.50, an alpha level of .05, and power of .90. A random sample of 100 was selected each from the teachers and principals remaining in the database after missing data were removed. Descriptive statistics were used to describe both the database from which the random sample was selected and the random selection of teachers and principals. Reliability of the eight scales was assessed using Cronbach's alpha coefficient. The results of the analyses are presented in Chapter Four.

CHAPTER FOUR: RESULTS

Overview

The purpose of this study was to gain insight into how teachers and principals perceive the climate in their school. The researcher used an ex-post facto causal-comparative research design to evaluate principal and teacher perceptions of working conditions using the NCTWCS. A multivariate analysis of variance with two independent groups was used to compare the teacher and principal responses to the eight scales selected from the NCTWCS.

Research Question

RQ: Are there statistically significant differences in perceptions of working conditions between principals and teachers as measured by eight scales of the North Carolina Teacher Working Conditions Survey?

Null Hypothesis

H₀: There are no statistically significant differences in perceptions of working conditions between principals and teachers as measured by eight scales of the North Carolina Teacher Working Conditions Survey.

Descriptive Statistics of Data Set

Cases were removed from the database downloaded from the New Teacher Center if all responses to scale items were not completed, if respondent was not from a *regular school*, was not a teacher or principal/assistant principal, or was not in a school with a grade-level configuration that conformed to PK–5, 6–8, or 9–12. Additionally, only participants who reported their years of experience as an educator were included. This resulted in 33,379 cases. The characteristics of this clean dataset are presented in Table 3. Ninety-three percent of the respondents were teachers, more than half (52%) were located in elementary schools, and more

than one third (36%) had between 11 and 20 years of experience. Almost one third (32%) of the educators were located in schools that had enrollments between 501 and 750 students.

Table 3

Characteristics of Clean Dataset (n = 33,379)

Characteristic	Teachers (n = 31,041)		Principals (n = 2,338)	
	n	%	n	%
Grade level				
Elementary*	16,130	52.0	1,062	45.4
Middle school	6,421	20.7	556	23.8
High school	8,490	27.4	720	30.8
Enrollment				
20–500	8,370	27.0	689	29.5
501–750	9,919	32.0	690	29.5
751–1000	5,712	18.4	426	18.2
1001–2775	7,040	22.7	533	22.8
Years of experience				
First year	1,267	4.1	12	0.5
1–3	3,490	11.2	22	0.9
4–6	4,261	13.7	41	1.8
7–10	4,862	15.7	259	11.1
11–20	10,990	35.4	1,130	48.3
More than 20 years	6,171	19.9	874	37.4

* *Note.* Elementary grade configuration contained any school with lower grades ranging from PK to Grade 3 and the highest grade at Grade 5. Therefore, schools with PK–5, KG–5, or 1–5, 2–5, and 3–5 grade levels were considered elementary schools.

Random Sample of Cases for Analysis

A SPSS procedure was used to select 100 teachers and 100 principals randomly from the clean dataset of 33,379 cases. These 200 cases were analyzed for multivariate outliers, normality, and homogeneity of variances. By using Mahalanobis distance to detect multivariate outliers, three cases were found and removed. Although skewness and kurtosis values for each scale were within normal bounds ($\sim \pm 1$), the Kolmogorov-Smirnov test of normality was significant for each scale ($p = .02$ or less). Box's test of equality of covariance matrixes was also significant ($p < .01$). However, as discussed in Chapter 3, MANOVA is not sensitive to

violations of the assumptions of normality or homogeneity of variance (Eberly College of Science, 2018). Therefore, the sample of 98 teachers and 99 principals was used to answer the research question. Table 4 contains a description of the teachers and principals in the random sample.

Table 4

Characteristics of Random Sample (n = 197)

Characteristic	Teachers (n = 98)		Principals (n = 99)	
	n	%	n	%
Grade level				
Elementary*	49	50.0	53	53.5
Middle school	27	27.6	23	23.2
High school	22	22.4	23	23.2
Enrollment				
20–500	28	28.6	28	28.3
501–750	29	29.6	31	31.3
751–1000	20	20.4	15	15.2
1001–2775	21	21.4	25	25.3
Years of experience				
First year	4	4.1	1	1.0
1–3	12	12.2	1	1.0
4–6	8	8.2	2	2.0
7–10	9	9.2	9	9.1
11–20	40	40.8	46	46.5
More than 20 years	25	25.5	40	40.4

* *Note.* Elementary grade configuration contained any school with lower grades ranging from PK to Grade 3 and the highest grade at Grade 5. Therefore, schools with PK–5, KG–5, or 1–5, 2–5, and 3–5 grade levels were considered elementary schools.

Reliability of Scales

The reliability of the eight scales of the NCTWCS was assessed using Cronbach's alpha coefficient. Table 5 contains the values obtained from all cases in the clean dataset, from the teachers and principals in the clean dataset, and from the random selection of cases, by all cases and by principal and teacher. The alpha coefficients for the clean dataset ranged from .86 to .97, while the alpha coefficients for the random sample ranged from .86 to .98. All values obtained

were satisfactory, although the alpha coefficient for the random sample of principals was .75; lower than the values obtained in the total cases and the principal cases in the clean database.

Table 5

Reliability (Cronbach Alpha) of Selected Scales of the NCTWCS

Scale	# of items	Clean dataset			Random sample		
		All cases (<i>n</i> = 33,379)	Teachers (<i>n</i> = 31,041)	Principals (<i>n</i> = 2,338)	All cases (<i>n</i> = 197)	Teachers (<i>n</i> = 98)	Principals (<i>n</i> = 99)
Use of time in school	7	.88	.87	.83	.88	.85	.75
School facilities and resources	10	.90	.90	.96	.91	.89	.88
Community support and involvement	8	.91	.90	.89	.92	.95	.89
Managing student conduct	7	.91	.91	.89	.92	.91	.88
Teacher leadership	7	.95	.95	.91	.95	.95	.90
School leadership	19	.97	.97	.96	.98	.98	.96
Professional development	13	.96	.96	.94	.96	.96	.94
Instructional practice and support	10	.86	.86	.85	.86	.84	.85

Results

The null hypothesis for this study states that there are no significant differences in perceptions of working conditions between principals and teachers as measured by eight scales of the North Carolina Teacher Working Conditions Survey. The responses of 98 teachers and 99 principals to the eight NCTWCS scales were used in a MANOVA to determine if differences existed between the two groups. A significant difference was found at the multivariate level, $F(88, 188) = 12.90, p < .001$, indicating that differences existed between teachers and principals on at least one scale. Table 6 contains the univariate findings for each scale of the NCTWCS. In

each case, the principals responded higher on the scale than did the teachers. The mean scale scores of the teachers ranged from 2.82 to 3.10, while the mean scale scores of the principals ranged from 3.26 to 3.63. Also included in Table 6 are the effect sizes interpreted as Cohen's d and partial eta square.

Table 6

Results of MANOVA Comparison of Teacher and Principal Responses to the NCTWCS

Scale	Teacher ($n = 98$)		Principal ($n = 99$)		F	p	d	Partial η^2
	Mean*	SD	Mean	SD				
Use of time in school	2.82	0.61	3.50	0.38	89.92	< .001	0.63	.32
School facilities and resources	3.07	0.52	3.55	0.41	51.11	< .001	1.03	.21
Community support and involvement	3.01	0.58	3.42	0.41	32.59	< .001	0.82	.14
Managing student conduct	3.00	0.60	3.54	0.42	52.38	< .001	1.04	.21
Teacher leadership	3.10	0.64	3.45	0.39	52.92	< .001	0.66	.21
School leadership	3.04	0.62	3.63	0.37	65.35	< .001	1.16	.25
Professional development	2.99	0.56	3.42	0.43	36.07	< .001	0.86	.16
Instructional practice and support	2.99	0.43	3.26	0.41	21.77	< .001	0.64	.10

* Means range from 1 (*strongly disagree*) to 4 (*strongly agree*).

Figure 1 contains a graphic representation of the teacher and principal responses to the eight scales of the NCTWCS. The Box plots show the highest and lowest scores, the mean, and the upper and lower limits of the standard deviation of each scale for teachers and principals. In each case, the teachers had lower means and larger standard deviations for each scale.

Therefore, there is sufficient evidence to reject the null hypothesis.

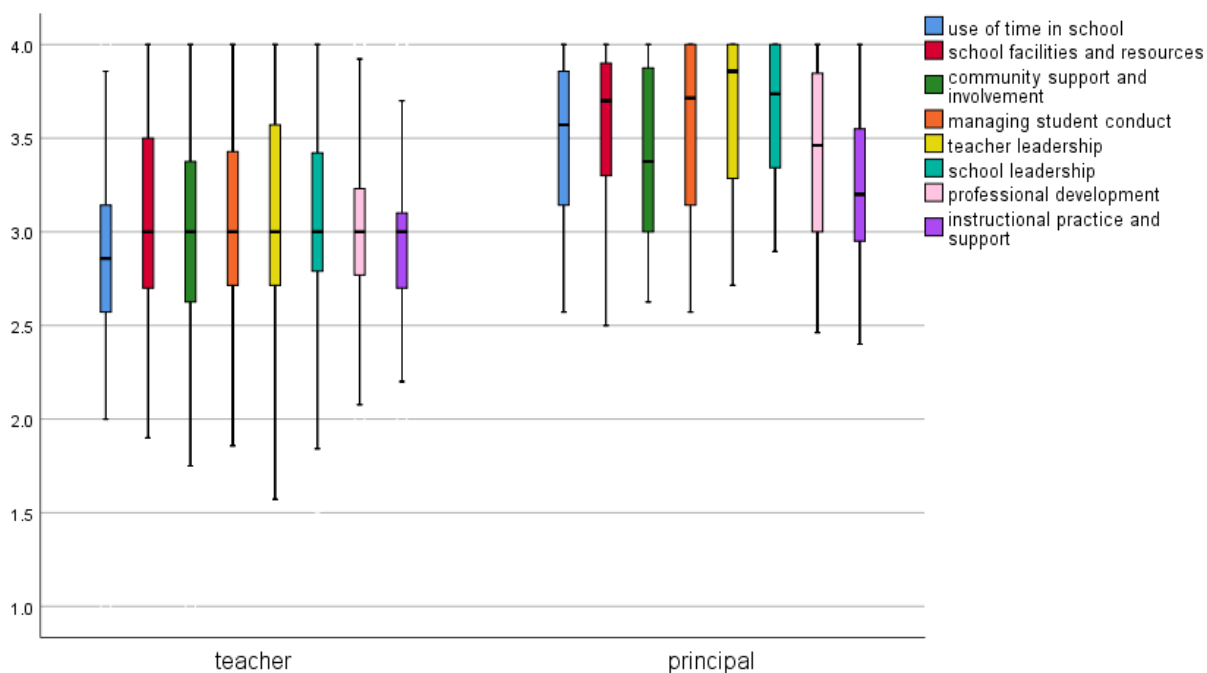


Figure 1. Box plots of teacher and principal responses to eight scales of the NCTWCS.

Summary

A dataset containing 101,846 responses was provided by the New Teacher Center for analysis of one research question. After data cleaning, a random selection of 100 teachers and 100 principals was taken from 33,379 clean cases. MANOVA was used to compare eight NCTWCS scale scores of the teachers and principals. Significant differences were found between the teachers and principals on all eight scales. Chapter 5 contains a discussion of those findings.

CHAPTER FIVE: CONCLUSIONS

Overview

The purpose of this study was to evaluate how teachers and principals perceive their school climate. The North Carolina Teacher Working Conditions survey was used to understand individual school climate constructs and evaluate them on a holistic level to determine perceptions of teacher working conditions. This section contains a discussion of the results of the study, implications for educators, limitations, and recommendations for future research possibilities.

Discussion

An ex-post facto causal-comparative survey research design was used to determine if differences existed between principal and teacher perceptions of working conditions in North Carolina. There were 101,846 responses to the 2016 NCTWCS. The researcher used a random sample of 100 teachers and 100 principals from the clean dataset of 33,379 cases of North Carolina principal and teacher responses for analysis.

RQ: Are there statistically significant differences in perceptions of working conditions between principals and teachers as measured by eight scales of the North Carolina Teacher Working Conditions Survey?

School climate is a popular research construct known by many names such as teacher working conditions, working conditions and work environment but does not have a clear definition (Huang et al., 2015; La Salle et al., 2016; Momna & Anis-ul-Haque, 2014; Voight et al., 2015). Teacher working conditions has not been heavily researched but as more information is gathered on school climate this topic is becoming more popular due to the impact staff and their perceptions of their working conditions have on the overall climate and student

achievement (Huang et al., 2015; Kilinc, 2014; Pogodzinski, 2014). As the focus on educational reform continues, educators are becoming more interested in all aspects of school climate including staff perceptions of their working conditions (Huang et al., 2015). This study will add to this growing body of research. Unfortunately, this instrument did not survey all aspects of school climate. Because the survey was anonymous and demographic information was not given, there was no way to evaluate the differences between races nor was there a scale that evaluated the racial climate of the school.

Principals had smaller standard deviations than did teachers on all scales, indicating that their answers were more similar to each other than were the responses of the teachers to each other. Research suggests that educators with less experience rate their perception of teacher working conditions higher than veteran educators do (Pogodzinski, 2014). Veteran educators are typically assigned more administrative responsibilities, giving them an in-depth look at the behind the scenes factors related to teacher working conditions than their novice peers (Musselman et al., 2014; Pogodzinski, 2014). Thus, the differences in years as an educator could be a factor in the larger standard deviations for teachers. Although this study did not examine years as an educator as a factor in the statistical analyses, the results showed that principals of all school levels had less variation in their perception of teacher working conditions than did the teachers. Novice or veteran principal status did not appear to affect perception of the working environment as it did with teachers.

Principals were more likely to rate the items on each scale closer to 4 (*strongly agree*) than did the teachers. The results indicated that principals have a higher perception of teacher working conditions and school climate than teachers did. Principals who rely on teachers to help with administrative responsibilities may cause principals to have a higher perception of their

work environment because they are more successful than their peers are due to less burnout and a collaborative environment that increases student achievement (Musselman et al., 2014).

The analysis did not provide results that could explain why the principals were more likely to rate the items on each scale higher than the teachers did. The organization climate of the school may play a big part in the differences in perception as it shows that teachers and principals do not always share common beliefs and values that would strengthen the organizational culture (Gulsen & Gulenay, 2014; Snyder, 2015). It could be that principals have been teachers prior to accepting their positions and think they know what teachers are facing and overlay that information with what the district is asking of them. This knowledge would give principals a better understanding of the expectations of the school environment. In contrast, these differences could exist because principals are more removed from what is happening in the classroom. These principals may have an open organizational climate where they foster teacher leadership that would take principals out of certain decision-making processes (Gulsen & Gulenay, 2014). However, the opposite may be true. Principals are also responsible for school decisions without input from anyone else. Either way, they may not see how their decisions affect the day-to-day activities in the classroom and the school environment.

Teachers feel that they have so much to accomplish and principals are not giving them enough time to get everything done creating added stress (Wong, 2015). If they are not voicing their opinion principals may conclude that everything is working well, which encourages them to continue with their current decision-making process. There is no evidence in the results to explain clearly why principals were more likely to agree strongly with items on the scales than did the teachers.

The large difference in the means between principals and teachers was in relation to use of time in school. Teachers had a mean of 2.82 and principals had a mean of 3.50. This was the lowest mean of all the scales in relation to teachers. The most common factors in teacher job satisfaction are working hours, salary, adequate staffing, and work environment dynamics (Chesnut & Cullen, 2014; Wong, 2015). The number of hours worked has been shown to significantly impact self-esteem and job satisfaction (Wong, 2015). The more teachers accomplish during normal work hours means their home lives are less affected, which increases their job satisfaction (Wong, 2015). This leads this researcher to believe that teachers want to be as efficient as possible during work hours. They do not want to spend time on activities they deem to be frivolous, that do not help them achieve their goals, or cause them to have to work extended hours. Teachers become dissatisfied and leave their profession when they have a negative perception of their working environment (Chesnut & Cullen, 2014; Pogodzinski, 2014; Wong, 2015). The results show that time was a scale that teachers scored the lowest.

The smallest difference in the means between principals and teachers was on the instructional practice and support scale. Principals had a mean of 3.26 and teachers had a mean of 2.99. This was the lowest mean for principals. Principals and teachers share a common goal of collectively helping students using a number of best practices to increase student academic achievement (Cherkowski & Walker, 2016). School improvement takes a community effort, which would lessen the gaps between the perceptions of teachers and principals on their perceptions of working conditions (Cherkowski & Walker, 2016).

The school facilities and resources scale evaluated the ability to access technology and school resources available to teachers. Teachers had a mean of 3.07 and principals had a mean of 3.55. Resource availability and the proper allocation of funds are vital to helping teachers and

decreasing stress (Hill et al., 2015; Pogodzinski, 2014). The community support and involvement scale evaluated community and parental/guardian support. Parental involvement has been shown to play a factor in the school environment (Lazaridou & Kassida, 2015). Principals had a mean of 3.42 and teachers had a mean of 3.01.

The managing student conduct scale evaluated classroom policies and school safety. The classroom climate refers to interpersonal relationships such as student-teacher relationships, peer relationships, and the academic environment. The way administrators manage student conduct reflects their perceptions and subsequent school policies (Baumann & Krskova, 2016). Teachers had a mean of 3.00 and principals had a mean of 3.54, indicating that they agreed with the items evaluated.

The teacher leadership scale evaluated teachers' opportunities to make decisions within their school environment. Principals had a mean of 3.45 and teachers had a mean of 3.10. Teacher leadership is a way for teachers to have ownership over their classroom and enhance effective teaching practices (Kilinc, 2014; Musselman et al., 2014).

The school leadership scale evaluated the administrative support system. Teachers had a mean of 3.04 and principals had a mean of 3.63. This was the highest mean for principals, possibly indicating that they were confident in their ability to lead. Research indicates that relying solely on the principal creates barriers to teaching and learning (Kilinc, 2014).

The professional development scale evaluated educators' opportunities to have new learning experiences. Principals had a mean of 3.42 and teachers had a mean of 2.99. Teachers having access to mentors or human resources is one way to promote professional development (Pogodzinski, 2014). Overall, teachers and principals agreed with the items surveyed on the scales based on the mean values.

Implications

Although the research design used for this study does not lead to strong assumptions, it does open the door for further research (Gall et al., 2007). The results of this study can be used to begin to understand why principals had a higher perception of working conditions than teachers did. Principals rated every scale used to describe working conditions in the NCTWCS higher than the teachers did. Therefore, they have a different perception of teacher working conditions and school climate than teachers. The items on the NCTWCS did not provide the researcher with variables that could provide evidence for why these differences existed, but it does let educators know that there are differences between principals and teachers in their perceptions of teacher working conditions.

Principals and teachers are the driving forces behind school culture and a positive school climate (Musselman et al., 2014; Pogodzinski, 2014). Understanding these differences can help decision makers design educational reform policies that can create positive school climates and increase school improvement efforts (Huang et al., 2015). The implications from this study are numerous because researchers can now state definitively that there are differences in teacher and principal perceptions of the working environment. This study gives researchers the ability to ask why these differences exist and propose a way to lessen the gap in perceptions. Principals and teachers may never completely agree on their perceptions of school climate or teacher working conditions but they can work together to ensure they create an environment that inspires teacher retention and increased student academic achievement.

The purpose of this study was to open the door for discussion of teacher working conditions. School climate is commonly evaluated from the perception of the students or teachers but it not frequently evaluated to indicate how teachers feel about their working

conditions (Kilinc, 2014; Pogodzinski, 2014; Wong, 2015). This study allows teachers to have a voice in their working conditions. North Carolina uses this instrument to foster a discussion of the teacher working environment amongst educators and help educational reform initiatives (New Teacher Center, 2016). They want to improve working conditions of teachers, thus improving student achievement. This study added to the research stating that teachers and principals do not agree on how their working environment is currently structured in North Carolina. It now allows them the opportunity to sit down for an open, honest discussion on how to improve their school climate, school environment, and teacher working conditions.

Limitations

An ex-post facto causal-comparative research design does not allow the researcher to ask additional questions to gain a better understanding of why participants answered a certain way. Although this type of research design is more simplistic in nature, it does provide the researcher an avenue to start asking questions and propose further research. Teacher working conditions can be examined differently based on the various theories, elements of the work environment, or theoretical frameworks, such as economic theory of utility maximization and organization theory (Pogodzinski, 2014). Some common themes exist across the numerous instruments and constructs used to describe school climate (Huang et al., 2015). However, the constructs used by researchers vary due to the type of research they are conducting, instruments used, or items they are evaluating. There is no uniformity in the evaluation of teacher working conditions. Many researchers are evaluating school climate but do not think of teacher working conditions as a construct to be considered when doing so.

There is no universal definition of school climate (Huang et al., 2015). Researchers create their own definition of school climate to denote how they developed their theories and

came to their conclusions based on the results of their research. These theories are pulled from numerous areas such as psychology and behavioral studies (Huang et al., 2015). This is because school climate involves many factors. No one definition encompasses the construct fully.

Research can be conducted to determine differences in the population by length of time as an educator, school size, grade level, or any other variable captured by this specific instrument. The purpose of the current study was to determine differences in perceptions of working conditions between teachers and principals. The researcher did not delve further into the data obtained from this instrument. However, the results found in the current study give researchers a starting point for additional research.

Recommendations for Future Research

This instrument is given to participants every 2 years. A longitudinal study to evaluate the differences across several administrations of the survey may lead to a better understanding of how perceptions of working conditions are formed. The results from a previous year may influence the results of a later survey or change as students move through the educational system. Educational reform may influence the administrative responsibilities of educators, thus shifting teacher perceptions of the work environment (Musselman et al., 2014).

Additional research could be conducted on the differences in the perception of teachers and principals toward teacher working conditions based on school size. This would give educators a better understanding of whether principals and teachers in small, medium, or large schools have similarities or differences in how they perceive teacher working conditions. If schools of the same size have similarities in perception of teacher working conditions, then research could be done to determine why these similarities exist.

Another avenue for research is teacher experience. It is recommended that further research be conducted to determine how experience tempers perceptions of both teachers and principals. Differences in perception between novice (teachers who have 3 or fewer years of experience) and veteran educators could be attributed to teacher workload or the induction process (Pogodzinski, 2014).

REFERENCES

- Adamson, F., & Darling-Hammond, L. (2012). Funding disparities and the inequitable distribution of teachers: Evaluating sources and solutions. *Education Policy Analysis Archives, 20*(37), 1–42.
- Baly, M. P., Cornell, D. G., & Lovegrove, P. (2014). A longitudinal investigation of self and peer reports of bullying victimization across middle school. *Psychology in the Schools, 51*(3), 217–240.
- Baumann, C., & Krskova, H. (2016). School discipline, school uniforms and academic performance. *International Journal of Educational Management, 30*(6), 1003–1029.
- Borrelli, I., Benevene, P., Fiorilli, C., D'Amelio, F., & Pozzi, G. (2014). Working conditions and mental health in teachers: A preliminary study. *Occupational Medicine, 64*(7), 530–532.
- Chen, C. Y. (2015). A study showing research has been valued over teaching in higher education. *Journal of the Scholarship of Teaching and Learning, 15*(3), 15–32.
- Cherkowski, S., & Walker, K. (2016). Purpose, passion and play: Exploring the construct of flourishing from the perspective of school principals. *Journal of Educational Administration, 54*(4), 378–392.
- Chesnut, S. R., & Cullen, T. A. (2014). Effects of self-efficacy, emotional intelligence, and perceptions of future work environment on preservice teacher commitment. *Teacher Educator, 49*(2), 116–132.
- Christensen, R., & Knezek, G. (2015). The Climate Change Attitude Survey: Measuring middle school student beliefs and intentions to enact positive environmental change. *International Journal of Environmental & Science Education, 10*(5), 773–788.

- Connell, N. M., El Sayed, S., Reingle Gonzalez, J. M., & Schell-Busey, N. M. (2015). The intersection of perceptions and experiences of bullying by race and ethnicity among middle school students in the United States. *Deviant Behavior, 36*(10), 807–822.
- Dymnicki, A. B. (2014). Moderating effects of school climate on outcomes for the multisite violence prevention project universal program. *Journal of Research on Adolescence, 24*(2), 383–398.
- Eberly College of Science. (2018). *Applied multivariate statistical analysis: Model assumptions and diagnostics assumptions*. State College, PA: Pennsylvania State University, Department of Statistics. Retrieved from <https://onlinecourses.science.psu.edu/stat505/node/131/>
- Faul, F., Buchner, A., Erdfelder, E., & Lang, A-G. (2014). *G*Power version 3.1.9.2*. Kiel, Germany: Universität Kiel.
- Ferrás, S. D., & Selman, R. L. (2014). How students' perceptions of the school climate influence their choice to upstand, bystand, or join perpetrators of bullying. *Harvard Educational Review, 84*(2), 162–187, 278.
- Fuller, E., Hollingworth, L., & Liu, J. (2015). Evaluating state principal evaluation plans across the United States. *Journal of Research on Leadership Education, 10*(3), 164–192.
- Gall, M. D., Gall, J. P., & Borg, W. R. (2007). *Educational research: An introduction* (8th ed.). New York, NY: Allyn & Bacon.
- García, J., & De Lissovoy, N. (2013). Doing school time: The hidden curriculum goes to prison. *Journal for Critical Education Policy Studies, 11*(4), 49–69.

- Garza, J. E., Drysdale, L., Gurr, D., Jacobson, S., & Merchant, B. (2014). Leadership for school success: Lessons from effective principals. *International Journal of Educational Management, 28*(7), 798–811.
- Gomez, M. A., Marcoulides, G. A., & Heck, R. H. (2012). Examining culture and performance at different middle school level structures. *International Journal of Educational Management, 26*(2), 205–222.
- Gonzales, S. M., & Gabel, S. L. (2017). Exploring involvement expectations for culturally and linguistically diverse parents: What we need to know in teacher education. *International Journal of Multicultural Education, 19*(2), 61–81.
- Green, S. B., & Salkind, N. J. (2011). *Using SPSS for Windows and Macintosh: Analyzing and understanding data* (6th ed.). Upper Saddle River, NJ: Prentice Hall.
- Gulsen, C., & Gulenay, G. B. (2014). The principal and healthy school climate. *Social Behavior & Personality: An International Journal, 42*, 93–100.
- Hansen, J. (2014). Personal-academic studies engage urban seventh-grade students. *Middle School Journal, 46*(1), 20–25.
- Herring, M., Curran, C., Stone, J., Davidson, N., Ahrabi-Fard, I., & Zhbanova, K. (2015). Emerging qualities of effective teaching: Embracing new literacies. *Educational Forum, 79*(2), 163–179.
- Hill, H. C., Blazar, D., Lynch, K. (2015). Resources for teaching: Examining personal and institutional predictors of high-quality instruction. *AERA Open, 1*(4), 1–23.
- Huang, F. L., Cornell, D. G., Konold, T., Meyer, J. P., Lacey, A., Nekvasil, E. K.,...Shukla, K. D. (2015). Multilevel factor structure and concurrent validity of the teacher version of the Authoritative School Climate Survey. *Journal of School Health, 85*(12), 843–851.

- Hung, A. H., Luebbe, A. M., & Flaspohler, P. D. (2015). Measuring school climate: Factor analysis and relations to emotional problems, conduct problems, and victimization in middle school students. *School Mental Health, 7*(2), 105–119.
- Jain, S., Cohen, A. K., Huang, K., Hanson, T. L., & Austin, G. (2015). Inequalities in school climate in California. *Journal of Educational Administration, 53*(2), 237–261.
- Kahraman, N. (2014). Investigating the relationship between science teachers' self-efficacy, work environment and their job satisfaction based on TIMSS 2011. *Journal of Theory & Practice in Education, 10*(4), 1091–1101.
- Kaplan Toren, N., & Seginer, R. (2015). Classroom climate, parental educational involvement, and student school functioning in early adolescence: A longitudinal study. *Social Psychology of Education, 18*(4), 811–827. Retrieved from ERIC database. (EJ1082943)
- Kilinc, A. Ç. (2014). Examining the relationship between teacher leadership and school climate. *Educational Sciences: Theory and Practice, 14*(5), 1729–1742.
- Kim, H., Schwartz, K., Cappella, E., & Seidman, E. (2014). Navigating middle grades: Role of social contexts in middle grade school climate. *American Journal of Community Psychology, 54*(1/2), 28–45.
- Kõiv, K. (2014). Comparison and connections between school climate, school safety and adolescents' antisocial behavior across three types of schools. *Social Education, 39*(3), 203–213.
- König, J., Blömeke, S., & Kaiser, G. (2015). Early career mathematics teachers' general pedagogical knowledge and skills: Do teacher education, teaching experience, and working conditions make a difference? *International Journal of Science & Mathematics Education, 13*(2), 331–350.

- Kraft, M. A., & Papay, J. P. (2014). Can professional environments in schools promote teacher development? Explaining heterogeneity in returns to teaching experience. *Educational Evaluation and Policy Analysis, 36*(4), 476–500.
- La Salle, T. P., Zabek, F., & Meyers, J. (2016). Elementary student perceptions of school climate and associations with individual and school factors. *School Psychology Forum, 10*(1), 55–65. Retrieved from ERIC database. (EJ1149034)
- Lazaridou, A., & Kassida, A. G. (2015). Involving parents in secondary schools: Principals' perspectives in Greece. *International Journal of Educational Management, 29*(1), 98–114.
- McCormick, M., Cappella, E., O'Connor, E., & McClowry, S. (2015). Context matters for social-emotional learning: Examining variation in program impact by dimensions of school climate. *American Journal of Community Psychology, 56*(1/2), 101–119.
- Mitchell, R. M., Mendiola, B. J., Schumacker, R., & Lowery, X. (2016). Creating a school context of success: The role of enabling school structure & academic optimism in an urban elementary & middle school setting. *Journal of Educational Administration, 54*(6), 626–646.
- Mojša-Kaja, J., Golonka, K., & Marek, T. (2015). Job burnout and engagement among teachers: Worklife areas and personality traits as predictors of relationships with work. *International Journal of Occupational Medicine & Environmental Health, 28*(1), 102–119.
- Momna, A., & Anis-ul-Haque, M. (2014). Development of School Climate Scale (SCS): Measuring primary school teachers' perceptions in Islamabad, Pakistan. *FWU Journal of Social Sciences, 8*(2), 51–58.

- Musselman, M., Crittenden, M., & Lyons, R. (2014). A comparison of collaborative practice and teacher leadership between low-performing and high-performing rural Kentucky high schools. *The Rural Educator*, 35(3), 22–30.
- National Center for Education Statistics. (2014). *Indicators of school crime and safety: 2013*. Washington, DC: U.S. Department of Education. Retrieved from http://nces.ed.gov/programs/crimeindicators/crimeindicators2013/ind_11.asp
- New Teacher Center. (2014). *North Carolina teacher working conditions*. Retrieved from <http://www.ncteachingconditions.org/>
- New Teacher Center. (2016). *TELL survey initiative*. Retrieved from <https://newteachercenter.org/approach/teaching-empowering-leading-and-learning-tell/>
- New Teacher Center. (2018). *About the North Carolina Teacher Working Conditions Survey*. Retrieved from <http://www.ncteachingconditions.org/>
- North Carolina Public Schools. (2016). *Facts and figures 2015–16*. Retrieved from <http://www.ncpublicschools.org/docs/fbs/resources/data/factsfigures/2015-16figures.pdf>
- Plato. (360 B.C.) *The republic* (B. Jowett Trans.). Retrieved from <http://classics.mit.edu/Plato/republic.html>
- Pogodzinski, B. (2014). Collegial support and novice teachers' perceptions of working conditions. *Journal of Educational Change*, 15(4), 467–489.
- Posner, B. (2015). An investigation into the leadership practices of volunteer leaders. *Leadership & Organization Development Journal*, 36(7), 885–898.
- Quin, J., Deris, A., Bischoff, G., & Johnson, J. T. (2015). Comparison of transformational leadership practices: Implications for school districts and principal preparation programs. *Journal of Leadership Education*, 14(3), 71–85.

- Ramzan, M., Jalal, S., & Amjad, M. (2016). Teachers' reaction on curriculum change and implementation practices. *Pakistan Journal of Social Sciences*, 36(1), 585–594.
- Riedler, M., & Eryaman, M. Y. (2016). Complexity, diversity and ambiguity in teaching and teacher education: Practical wisdom, pedagogical fitness and tact of teaching. *International Journal of Progressive Education*, 12(3), 172–186. Retrieved from ERIC database. (EJ1116884)
- Snyder, K. (2015). Engaged leaders develop schools as quality organisations. *International Journal of Quality and Service Sciences*, 7(2/3), 217–229.
- Swanlund, A. (2011). *Identifying working conditions that enhance teacher effectiveness: The psychometric evaluation of the Teacher Working Conditions Survey*. Chicago, IL: American Institutes for Research.
- 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.
- Veenstra, R., Lindenberg, S., Huitsing, G., Sainio, M., & Salmivalli, C. (2014). The role of teachers in bullying: The relation between antibullying attitudes, efficacy, and efforts to reduce bullying. *Journal of Educational Psychology*, 106(4), 1135–1143.
- Voight, A., Hanson, T., O'Malley, M., & Adekanye, L. (2015). The racial school climate gap: Within-school disparities in students' experiences of safety, support, and connectedness. *American Journal of Community Psychology*, 56(3/4), 252–267.
- Wong, Y. P. (2015). Development of a work environment rating scale for kindergarten teachers. *Occupational Medicine*, 65(6), 489–495.

Yoon, J., & Bauman, S. (2014). Teachers: A critical but overlooked component of bullying prevention and intervention. *Theory into Practice, 53*(4), 308–314.

Young, M. (2013). Overcoming the crisis in curriculum theory: a knowledge-based approach. *Journal of Curriculum Studies, 45*(2), 101–118.