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Correlation Between Instructional School Culture and Student Achievement in an Urban District

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Concordia University–Portland

College of Education

Doctorate of Education Program

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Correlation Between Instructional School Culture and Student Achievement in an Urban District

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Dissertation submitted to the Faculty of the College of Education
in partial fulfillment of the requirements for the degree of
Doctor of Education in
Transformational Leadership

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Abstract

The Teachers Talent Toolbox needed a tool that could compile usable information on any given learning institution through data collection and analysis and provide usable qualitative and quantitative data that could be used to identify the causes of low achievement and provide necessary interventions within the school to improve student outcomes. To answer this need, the Instructional Culture Index/Insight Survey was developed by the New Teacher Project in 2016. The purpose of this correlational study was to statistically analyze the relationship between instructional school culture, as measured by the Insight Survey, and student achievement as measured by school performance composite scores for the academic years of 2015 to 2016 and 2016 to 2017. Both types of archived data were accessed from the State Department of Education website. In this study, data from 97 elementary schools from 2015 to 2016 and 95 elementary schools from 2016 to 2017 were used. A Pearson correlation test was conducted to determine the strength of the relationship between instructional school culture and student achievement in elementary schools within an urban school district. School culture and student achievement for the academic year 2015 to 2016 were positively but moderately correlated, $r(.474) = .47, p = .000$. School culture and student achievement for the academic year 2016 to 2017 were positively but weakly correlated, $r(.271) = .27, p = .008$.

Keywords: student achievement, urban school district, socioeconomically-challenged, school culture, correlational relationship, Pearson correlation, Title I, Instructional Culture Index (ICI)

Dedication

This dissertation is dedicated to my brother Chief Cameron Dixon (Atlanta Fire Dept.) and my father Wayman Franklin Graham, Sr. who both passed in October of 2014, not long after I started the process of acquiring my doctorate. I know you both are smiling down on me. This dissertation is also dedicated to my mother Dr. Alfreida Capers. She was not the first to complete college amongst her immediate family; however, she was the first to earn her doctorate.

Love you!

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Chapter 1: Introduction to the Problem

Students in Title I elementary schools are achieving below proficient levels due to the lack of effective leadership, organizational structure, and school cultures that promote professional development and knowledge sharing (Gurr, 2015). This negative school culture creates an environment of non-achievement, discourages knowledge workers, and ultimately leads to failing learning communities. Research indicated that instructional school culture is one of the identified factors associated with student achievement; that culture is dependent on teachers' perceptions of the leader and culture of the learning environment (Newman, 2014).

Background of the Problem

Academic outcomes as to student achievement were often results determined by school culture (Kleickmann, Tröbst, Jonen, Vehmeyer, & Möller, 2016). It has been determined that instructional school culture and student achievement were directly related (Gurr, 2015; Thapa, Cohen, Guffey, & Higgins-D'Alessandro, 2013). Taking it a step further, according to Tatum (2000), because culture and student achievement have been directly related, it may be that effective academic leaders are those who ultimately increase school culture and student achievement. Redding (2014) agreed with Gurr (2015) and Thapa et al. (2013) that effective organizational development should increase school culture and student academic proficiency.

There is a gap in research as it pertains to direct correlation as to instruction provided by predominantly Title I school districts, student achievement, and instructional school culture (Gurr, 2015; Moller, Mickelson, Stearns, Banerjee, & Bottia, 2013). More research is needed to see if specific components related to school culture and climate can serve as predictors of student achievement in low-income learning communities.

Statement of the Problem

The problem is the continued decline in student achievement for students in high poverty schools. In order to remedy the situation, factors that directly influence student achievement need to be identified so that all students share in positive outcomes of being able to achieve academically (Gurr, 2015). By researching the phenomenon, stakeholders may be better prepared to support student learning.

Purpose of the Study

Machi and McEvoy (2012) suggested a possible link or correlation existed between student achievement and school culture. To address the gap noted in the literature, this study was designed by statistically analyzing the relationship between the two variables, school culture and student achievement. The purpose of this correlational study was to determine the relationship between instructional school culture and student achievement in a district serving a high proportion of low socio-economically at-risk students.

Archived Instructional Culture Index/Insight (ICI) Survey data were collected and analyzed over the course of two years. The ICI was tested by the Research and Development Corporation (RAND) in 2012 for its reliability and validity. This instrument was deemed reliable and valid by researchers Yuan and Schweig (2016) who measured instructional school culture. Archived composite scores from standardized test data were used for student achievement data.

Significance of Study

This study contributed to the literature concerning instructional school culture and student achievement. School culture and student achievement were researched; however, research on school culture and student achievement in our most challenged areas was limited.

Researchers Khalifa, Gooden, and Davis (2016) concluded that a relationship existed in higher performing schools as to teachers' perceived perceptions of the school culture within those higher performing learning communities. When school culture positively impacts learning communities and stakeholders, improvement occurs, both directly and indirectly, as to the quality of life for the school community (Khalifa, Gooden, & Davis, 2016). The purpose of this correlational study was to determine the relationship between the instructional school culture and student achievement in socio-economically challenged school districts. Used in this study were two school years of archived data contained in the Instructional Culture Index/Insight survey that were collected and analyzed by the New Teacher Project (TNTP, 2016). The reliability and validity of the Instructional Culture Index/Insight survey data were confirmed by the RAND Foundation in 2012.

Research Questions and Hypotheses

To determine the relationship between the instructional school culture and student achievement in a socio-economically challenged school districts, the following research questions and hypotheses were designed to determine the relationships.

- RQ1. What is the correlational relationship between instructional school culture as measured by the Instructional Culture Index Survey (ICI) and student achievement as measured by school performance composite scores for the academic school year 2015 to 2016 in an urban school district?
- RQ2. What is the correlational relationship between instructional school culture as measured by the Instructional Culture Index Survey (ICI) and student achievement as measured by school performance composite scores for the academic school year 2016 to 2017 in an urban school district?

H₁₁: There is a relationship between instructional school culture as measured by the Instructional Culture Index/Insight Survey (ICI) and student achievement as measured by school performance composite scores for the academic school year 2015 to 2016.

H₀₁: There is no relationship between instructional school culture as measured by the Instructional Culture Index/Insight Survey (ICI) and student achievement as measured by school performance composite scores for the academic school year 2015 to 2016.

H₁₂: There is a relationship between instructional school culture as measured by the Instructional Culture Index/Insight Survey (ICI) and student achievement as measured by school performance composite scores for the academic school year 2016 to 2017.

H₀₂: There is no relationship between instructional school culture as measured by the Instructional Culture Index/Insight Survey (ICI) and student achievement as measured by school performance composite scores for the academic school year 2016 to 2017.

Research Design

Data for this correlational research study included two types: archived quantitative Instructional Culture Index/Insight Survey data, developed by the New Teacher Project (TNT), and composite scores from criterion-referenced third, fourth, and fifth grade English, language arts, mathematics, and fifth grade science standardized test data from an urban school district. The Instructional Culture Index/Insight Survey instrument had been accepted as a tool to measure school culture in the school district. Previous researchers have vetted the Instructional

Culture Index/Insight Survey and found it to be valid with a reliability rate up to 91% (Yuan & Schweig, 2016).

Schools with strong instructional cultures retain more of their effective teachers and achieve greater academic success with students (Watson & Bogotch, 2016). For such purposes, the New Teacher Project (TNTP; 2016) created the Instructional Culture Index/Insight Survey (ICI) for the following purposes:

- Use as a reliable measure of a school's instructional culture.
- To identify schools with strong instructional leadership practices.
- As a tool to collect and aggregate teacher feedback to aid instructional leaders.
- To help principals set priorities around instructional culture.
- To serve as a leading indicator of both teacher retention and student achievement.
- To capture the perceptions of teachers within the community.
- To draw an objective and unbiased conclusion of the effect of school culture on student achievement. (Yuan & Schweig, 2016)

The RAND foundation, which is highly respected as a research entity, found the ICI instrument as having reliability and validity, as the reliability of the instrument ranged from 0.77 to 0.91 (Yuan & Schweig, 2016) and is given twice in an academic year to confirm the validity of the data. For this study, the validity and reliability were determined using data from sources related to the schools in which the survey was given. The ICI survey data from an urban school district was used along with criterion-referenced standardized assessment results. The ICI is calculated from three survey items: peer culture, evaluation, and professional development, which were identified by the note *Index* throughout the report, and were reported on a scale from 1 to 10 (The New Teacher Project, 2016). These schools are referred to as Top-Quartile Schools.

The ICI Survey analyzes 10 domains to generate a raw score out of 10 for each school. The domains are learning environment, professional development, student growth measures, instructional planning, evaluation, workload, career progression, peer culture, retention, hiring practice, and observation/feedback. According to the Teacher Talent Toolbox (2017) schools that achieved higher ICI Survey scores received feedback indicating (a) the school was committed to improve instructional practice; (b) the expectation for effective teaching was clearly defined at the school; and (c) teachers at the school shared a common vision of what effective teaching looked like.

According to Yin (2003), researchers must conduct research with great attention to detail and methodological awareness. There needed to be justification based on the research methodology to use the correlations approach used in this study (Yin, 2003). The three primary correlational analysis instruments are Pearson's coefficient (r), Spearman's rho coefficient (r_s), and Kendall's tau coefficient of τ (Hauke & Kossowski 2011). The most common correlational coefficient, Pearson's coefficient of correlation, was utilized to test the strength of the linear relationship. Increases or decreases in one coefficient or variable relate to increases or decreases in the other variable (Swank & Mullen, 2017). Cause-and-effect-relationships are not established using these methodological approaches.

Pearson was the first to describe in detail the method of Pearson's calculation in 1896; however, Bravais discovered it in 1846 (Hauke & Kossowski, 2011). Pearson was able to show in detail why this was the best method to show the relationship between two variables or coefficients (Hauke & Kossowski, 2011). Curtis, Comiskey, and Dempsey (2016) contended that a correlational study was very important in scientific inquiry and helped to advance society

by studying the relationship between variables. Correlations amongst variables can be measured with the use of different indices or coefficients (Hauke & Kossowski, 2011).

Research conducted in the past utilized similar analyses methods, and researchers were able to formulate strong arguments as to their findings on the perceptions of teachers as to their school culture within the learning environment (Brown, 2016; Lopez, 2015). This research involved elementary schools within an urban school district to determine if there was a correlation between instructional school culture and student achievement. The research design was appropriate for the study and provided valid and reliable evidence of the correlation between instructional school culture and student achievement in elementary schools in an urban school district comprised mainly of Title I elementary schools.

Definition of Terms

Instructional school culture. Instructional school culture, as described in the research, was used to describe the school's perception of its climate by its stakeholders over an extensive period of time (Thapa et al., 2013).

Organizational adaptability. The way in which the organization's structure and system is set up to increase its effectiveness and ensure success.

School Culture. As described in the research by Thapa et al. (2013) was used to describe the school's perception of its climate by its stakeholders over an extended period of time.

Assumption, Limitations, and Delimitations

Assumptions. Assumptions were based on the following questions regarding truthfulness of responses and accuracy of data (Wargo, 2015). One assumption is that the teachers have answered the questions in the survey accurately. If the teachers answer the survey questions

accurately, then the hope is that the students have been honest in their responses too. It is assumed that the data depicting student achievement is accurate as well.

Limitations. Limitations are the shortcomings, conditions, or types of data that cannot be controlled by the researcher that place restrictions on methodology and conclusions (Wargo, 2015). In this study, there were some limitations to the research due to data inconsistencies. Some schools in the urban school district being researched rated low in school culture, yet they were above average in student proficiency in math and reading in third, fourth, and fifth grades. This phenomenon is potentially a source of outliers, which are data points that are three standard deviations from the mean and are important to address because they affect the statistical analysis and increase the likelihood of Type 1 errors (Osborne & Overbay, 2004). Another limitation was that only scores from one district within a two-year period were analyzed, thus limiting the generalizability of the study (Wargo, 2015). There was also a limitation in the number of schools and districts analyzed.

Delimitations. The biggest difference between limitations and delimitations is the amount or degree of control a writer of a dissertation has over them. In brief, delimitations can be defined as those choices made by the researcher (Dissertation Support, 2018). There were two specific delimitations in this study. The study site selected was an urban district with a high proportion of at-risk students. Data collected were from two consecutive school years because this time frame aligned with the time in which the researcher was available for work in the field.

Summary

Because research was limited on the relationship between instructional school culture and student achievement in the most challenging learning communities (Gurr & Drysdale, 2016), this study closed the gap by analyzing the correlation that existed between instructional school

culture and student achievement in a district with a high proportion of at-risk students. Chapter 1 includes the purpose of this study, the research questions, hypotheses, research design, assumptions, limitations, and delimitations. Study purpose and significance were covered in this chapter. Examined in the next chapter is the review of literature pertaining to instructional school culture and student achievement. The literature review explores factors that affect instructional school culture and student achievement. Additionally, the conceptual framework gives a basis for the need to explore the relationship between student achievement and school culture.

Chapter 2: Review of Literature

Newman (2014) reported that data accrued as to Title I schools revealed lower student achievement scores than non-Title I schools. Newman also reported that data on Title 1 schools showed a higher number of at-risk students were enrolled when 75% of the students were receiving free and reduced lunch. Hair, Hanson, Wolfe, and Pollak's (2015) research showed that students in socio-economically challenged learning environments, such as Title I schools, typically started school significantly behind their counterparts in economically stable environments. Hair et al. (2014) related that this phenomenon of being academically behind continued well into adulthood, and thereby creates a cycle difficult to break because the lack of education limits future secondary education and career opportunities for students (Hair et al., 2015). Raising student scores in Title I schools is an extremely important issue that demands a sense of urgency (Newman, 2014). Ensuring that all of our nation's student populations have the opportunity to contribute meaningfully to society is the foundational premise behind our educational system (Hair et al., 2015).

A publication titled the *Digest of Education Statistics 2014* (50th ed.), by Snyder, DeBary and, Dillow (2016) highlighted several statistics, which aggregated information by race and other societal factors, involving the state of education in America. Data showed that there was an enormous gap in the achievement levels of those in poverty and continued to widen when race and ethnicity were added to the equation (Snyder et al., 2016). To overcome this disparity, educators must look at the structure of our educational system and determine factors that promote student success in Title I or socio-economically challenged schools (Snyder et al., 2016).

Newman (2014) highlighted a relationship existed between instructional school culture and student achievement when educators perceived effective leadership was in place. Newman related in order to build school culture the instructional leader must utilize knowledge management and implement techniques that create knowledge workers. *Knowledge management* is a relatively new terminology that has been introduced into the organizational management platform. Educators in any low-performing Title I elementary schools could use organizational development to increase school culture and ultimately engage educators to focus on achievement (Newman, 2014).

The goal of organizational development, as conceptualized by Schmuck, Bell, and Bell (2012), was to implement a planned effort that focuses on improvement and changing norms, structures, and procedures, while using various methods to assess the observations and happenings. Organizational development and great school culture have been apparent in Title I learning communities at the elementary school level that have high-performing students (Brown, 2011).

Anyone who utilizes knowledge and the transfer of knowledge to other workers is a knowledge worker (Hislop, 2013). Professions that involve a quality of care would be considered as providing knowledge work. Drucker (1999) discussed the importance and significance of the knowledge worker in producing information that would help other knowledge workers in the performance of their jobs. In essence, skills of the knowledge worker help increase the achievement of students in Title I elementary schools by increasing the knowledge of all workers within the learning community and therefore increase the learning culture within the learning community (Drucker, 1999).

Mood (2009) believed that the ability of the knowledge worker to promptly address any concerns and answer any questions that may be pertinent to the jobs of the other knowledge workers determined the efficiency of the organization. Though knowledge workers may range from factory workers to educators to doctors, if the transfer of knowledge is critical to the success of the organization, then it is deemed as knowledge work (Turriago-Hoyos, Thoene, & Arjoon, 2016). For this study, the organization applied to a public school.

Many in the research community have concluded that school culture plays an important role in the success of a school (Adams, Ware, Miskell, & Forsyth, 2016; Gurr & Drysdale 2016; Louis, 2015). The instructional leader or principal must be considered a knowledge worker given the vast complexity of circumstances, situations, and scenarios that have to be addressed on a daily basis (Turriago-Hoyos et al., 2016). There is no universal set of guidelines and procedures that must be followed in handling the circumstances that are presented on a daily basis, so the principal of an elementary school is definitely easily identifiable as a knowledge worker (Newman, 2014). However, others could be described as knowledge workers within the organization more so than the principal (Turriago-Hoyos et al., 2016).

The following topics were explored for this study: (a) *instructional planning for student growth*, (b) *learning environment*, *career progression*, (c) *evaluation*, (d) *peer culture*, (e) *academic expectations*, (f) *school operations*, (g) *observation/feedback*, and (h) *professional development and leadership*. These topics, domains pertinent to this study, related directly to the Instructional Culture Index/Insight (ICI) Survey. Databases accessed for this study included Concordia University's databases, ProQuest, Google, and Google Scholar. Search terms used included *organizational development*, *organizational theory*, *knowledge workers*, *knowledge sharing*, *school culture*, *student achievement*, and *TNTP Instructional Culture Insight Survey*.

Other search terms included *instructional school culture, student culture, teacher accountability, best school leadership styles, teacher morale and highest achieving schools, and Title I and low-performing schools.*

Conceptual Framework

The conceptual framework for this study was based on the underlying concepts in the Instructional Culture Index/Insight Survey. The 10 domains of the Instructional Culture Index/Insight Survey analyzed the following: learning environment, instructional planning for student growth, career progression, evaluation, peer culture, academic expectations, observation/feedback, professional development, school operations, and leadership (TNTP, 2016).

Also, the conceptual framework regarding this study was based on organizational theory and organizational development factors that would promote a positive culture and climate. Moon (2009) stated that the ability of the knowledge worker to promptly address any concerns and answer any questions that may be pertinent to the jobs or tasks of the other knowledge workers determined the efficiency and proficiency of the organization. Effective teachers can ultimately determine the fate of their students based on their ability to effectively differentiate instruction based on their students' needs (Andrews-Larson, Wilson, & Larbi-Cherif, 2017).

The ability of the teacher to effectively accomplish differentiated instruction is based on the skill level of the teacher's ability to motivate students to learn and to set and accomplish goals (Kutsyuruba, Klinger, & Hussain, 2015). This type of motivation by the teacher in some respects is directly affected by the instructional leaders and their ability to create a culture and climate within the learning community that promote these positive behaviors (Thapa et al.,

2013). The success of the organization and what is deemed as knowledge work can determine the outcome of the organization (Hislop, 2013).

An organizational development program involves a systematic diagnosis of the organization, the development of a strategic plan for improvement, and the mobilization of resources to carry out the effort, which is essentially the definition of organizational theory and the framework that is consistent with all learning communities (Schmuck et al., 2012).

Organizational theory is a key component of an organization's ability to sustain continued success (Aydin, Sarier, & Uysal, 2013). Additionally, the structural frame of an organization is critical to its well-being (Hoy, 1990). The structures have to be in place that promote employee satisfaction and the building of relationships (Aydin et al., 2013). Like reading maps, frames are as critical as a legend and provide insight on a specific area and give tools for navigation (Bolman & Deal, 2013).

Organizational theory is a key component of the research design and conceptual framework. According to the organizational theory, every aspect of an organization must be analyzed and the role of every knowledge worker must be considered in the analysis. A thriving organization has to create a culture of accountability and goal setting (Schmuck et al., 2012). Goal setting and accountability is affected by the feelings experienced by staff members. "The educational organization's climate has to do with staff members' feelings about being part of the organization, the state of interpersonal relationships, the level of motive satisfaction, and shared feelings of success or failure" (Schmuck et al., 2012, p. 45). When staff members feel connected to their organization, members are able to focus on organizational goals instead of other peripheral things that may not carry as much concern.

Kythreotis, Pashiardis, and Kyriakides (2010) presented compelling evidence based on a study completed in Cyprus that shows the relationship between the school leader, school culture, and student achievement. However, there were some conflicts in their findings. For example, the researchers could not always show a consistent link between the school culture, school leader, and student achievement. In some cases, they were able to show a link between student achievement and school culture or a link between school achievement and the school leader.

Kythreotis et al. (2010) reported a group of researchers using statistical techniques such as structural equation modeling (SEM) and multilevel analysis that made it possible to examine the complex relationships between the principal's leadership and student achievement. This may be relative to the research contained within this study because it may identify outliers that were not truly consistent with the general body of research. Additionally, this ideology exists among researchers who believed that leadership does not affect school culture as much as the other entities involved within the learning community (Watson & Bogotch, 2016).

The principals and schools included in Yuan and Schweig's (2016) research study were selected using one or more of the following criteria: evidence of student achievement beyond expectations on state or national tests where this evidence exists, or principals' exemplary reputations in the community, and/or school system. Effective communication skills and instructional leadership and empowerment of the faculty, staff, and students increased the likelihood of a successful learning community (Brown, 2011).

Archived data that was already disaggregated by the state and district was used for the study. Included in the data analysis were findings from the Instructional Culture Index/Insight Survey and assessment data from third, fourth, and fifth grade math, ELA, and fifth-grade

science assessments tests. The purpose of this study was to analyze the correlation between student achievement and instructional school culture within this demographic.

Culture and climate. For this study, the term *school culture* as described in the research by Thapa et al. (2013) was used to describe the school's perception of its climate by its stakeholders over an extended period of time. School climate is essentially referring to how stakeholders feel the organization functions as a whole. A good instructional school culture has dedicated employees who have bought into the mission and vision of the instructional leader and are eager to move the work forward to accomplish the goals and achieve student success (Louis, 2015). Hoge, Smit, and Hanson (1990) determined a direct correlation between students' physical and mental health and the perceived instructional school culture of their learning communities. As a result, the Institute for Educational Sciences and the Centers for Disease Control and Prevention invested a considerable amount of resources in the research of school climate/culture and the effects on the learning community. The growing consensus among researchers has been that focusing on instructional school culture improves schools dramatically and could even help with non-academically based challenges in schools (Macneil, Prater, & Busch, 2009). For instance, researchers were looking at the number of bullying incidents and absenteeism in schools that have been found to have a robust school culture (Theta et al., 2013).

Scholars Thapa and colleagues (2013) used an extensive methodological process when they conducted their research on instructional school culture. They utilized Google Scholar to gain access to several peer reviewed journals on school culture and climate, invited the scholars to provide feedback, and came to a consensus on which key elements were critical in ascertaining the climate/culture of a of a learning community. The researchers did conclude that there were five main dimensions that represented a thriving school culture: safety, relationships,

teaching and learning, institutional environment, and the school improvement process (Thapa et al., 2013).

The Instructional Culture Index/Insight Survey used a system of domain ratings when quantifying instructional school culture in a learning community (Yuan & Schweig, 2016). The areas that defined the culture were safety, with an emphasis on physical safety; social and emotional safety and/norms; relationships, as they pertained to support; and respect for diversity, leadership, and compatibility. Next was teaching and learning with a focus on the whole child. Institutional environmental concerns pertained to the students' and teachers' perceptions of the physical environment. School improvement focused on vision, mission, and goals of the instructional leader as they related to the school improvement plan (Newman, 2014).

School culture/climate is very critical to children's academic, social, and emotional growth (Lopez, 2015). Instructional school culture reform has become one of the most researched items in education. With childhood suicides, hate crimes, and cyber-bullying becoming increasingly common, the Department of Education and the Centers for Disease Control and Prevention have expressed deep interest in the continued research of climate and its effect on the learning community (Thapa et al., 2013). With a constantly evolving student base and the push to create global citizens, high student achievement remains a major priority among educational leaders, scholars, and researchers (Thapa et al., 2013).

Knowledge management. Knowledge management is a critical component in moving any organization to its full potential (Hislop, 2013) and is essential in creating a thriving and sustainable instructional school culture that endures hardships that every learning community ultimately faces (Moon, 2009). Peter Drucker (1999) discussed the importance of knowledge workers and their significance in producing information that would help other knowledge

workers in the performance of their jobs. In essence, skills of the knowledge worker help increase the achievement of students and Title I elementary schools by increasing the knowledge of all workers within the learning community and therefore increasing the learning culture within the learning community (Newman, 2014).

Drucker (1999) believed that the ability of the knowledge worker to promptly address any concerns and answer any questions that may be pertinent to the jobs of the other knowledge workers could determine the efficiency of the organization (Moon, 2009). As the world becomes more competitive in virtually every aspect, it is important that knowledge sharing be an important part of day-to-day operations (Hau, Kim, Lee, & Kim, 2013). Knowledge management encompasses the fundamentals of knowledge sharing within an organization.

Researchers have identified two main concepts in knowledge sharing: tacit knowledge and explicit knowledge, key ingredients according to Hislop (2013) that could fundamentally change the culture of a school. Tacit knowledge refers to the knowledge that one ascertains through his or her own experiences. Explicit knowledge is more concrete and easily shared amongst knowledge workers. However, both tacit and explicit knowledge are key ingredients in the recipe that promote growth and continuity within a learning organization (Turriago-Hoyos et al., 2016). Successful knowledge management ensures that an organization continues to learn. Research from studies conducted on knowledge management and knowledge sharing (tacit and explicit knowledge) indicated that the two major antecedents are categorized as individual and social (Hau, Kim, Lee, & Kim, 2013).

Motivation to share knowledge is based on the motives of the individual. This is why instructional school culture plays an important role in knowledge sharing and knowledge management because individuals within a learning community have to act selflessly and share

information with other stakeholders for the betterment of the learning community (Turriago-Hoyos et al., 2016). The stakeholder has to buy into the benefit of moving the organization forward and thus increase student achievement through knowledge sharing (Hau et al., 2013).

The social category highlights the fact that knowledge sharing involves social interactions among workers. In the educational arena, stakeholders such as teachers, students, and administrators share this knowledge. The instructional leader must invest heavily in social capital or the network of positive social relationships within an organization. Fundamentally, the leaders within the learning community must create an environment that leans heavily on social interactions to ensure that instructional school culture can increase through knowledge sharing (Hau et al., 2013).

The depth and sensitivity of the knowledge to be shared can affect knowledge sharing and knowledge management (Turriago-Hoyos et al., 2016). Given the fact that tacit knowledge is gained through experiences, this knowledge can be more sensitive and not be as well received by other knowledge workers. However, given the gravity of the needs of students in our learning communities, especially in our most challenging educational environments, the sharing of tacit knowledge becomes an intrinsic part of building a stronger instructional school culture (Hislop, 2013). Instructional leaders must provide opportunities for this knowledge to be shared and promote the sharing of knowledge consistently amongst all stakeholders. The fundamental belief is when the individual feels that the benefit of sharing the knowledge outweighs the cost of not sharing the knowledge more knowledge workers would intrinsically share knowledge within their organization (Hislop, 2013; Hua et al., 2013).

The basic needs of the student body, coupled with a strong commitment to the vision, mission, and goals of the leader ultimately encourage the stakeholders within the learning

community to share knowledge with passion and fidelity (Aydin et al., 2013). This behavior contributes greatly to the culture and climate of their organization. Knowledge management in growing organizations continues to be one of the most important fibers in the thread that holds the fabric of great learning communities together. Additionally, at the foundation of these growing educational centers, systems are rooted in increasing and sustaining a vibrant student climate and/or culture through knowledge management (Hislop, 2013; Newman, 2014).

The New Teacher Project. Throughout this document, the New Teacher Project is referred to by its acronym TNTP. The rubric that is used to measure instructional school culture is produced by TNTP (The New Teacher Project, 2016) and focuses on 10 domains. The instrument is called the Instructional Culture Index/Insight Survey or referred to as ICI. The survey gives an abundance of data that were derived using a complex system of analysis as it pertained to respective domains relating to school and climate. The 10 domains of the Instructional Culture Index/Insight Survey are as follows: *learning environment, instructional planning for student growth, career progression, evaluation, peer culture, academic expectations, observation/feedback, professional development, school operations, and leadership*. The survey also covers employee retention and seeks to determine if the employee intends to stay in the learning community.

The learning environment is essential to the success of teacher and student alike. On the Instructional Culture Index/Insight Survey, there are six subcategories that make up the learning environment domain. Three of the questions ask, “Does leadership promote a safe environment?” “Are student misbehaviors immediately addressed?” and “Do you feel supported by your school leaders?”

Instructional planning for student growth has seven subcategories. The questions in this domain range from “Am I satisfied with the support I receive from school instructional planning?” “Do you have access to content experts?” and “Does leadership regularly review work from your students?” Observation and feedback have nine subcategories and are of great importance to educators because a large portion of their evaluations are based on observation and feedback. Within this domain, the questions range from “Do I receive feedback from observations?” “How much time is spent in our observation cycles?” and “Does your observer constantly follow up with you to see if you are successfully implementing the feedback?”

Professional development has six subcategories and specifically asks about the professional development opportunities that were offered within the last six months. To many in the educational research community, professional development is the cornerstone of highly effective educational practices that determines the overall aptitude of student success (Kleickmann et al., 2016). The challenge for instructional leaders is to create a culture of knowledge sharing and professional development to increase teacher capacity and ultimately increase student outcomes.

Evaluation has seven subcategories and asks questions specifically related to evaluation practices, criteria, scoring, fairness and the perception of the person evaluating them. Peer culture has five subcategories and asks questions ranging from “Do teachers have a common vision at your school?” “Are there teachers who set the example for highly effective teaching practices?” and “Is there a low tolerance for ineffective teaching at your school? Leadership has six subcategories and questions on the perceived effectiveness of leadership, the behaviors that school leaders model, and the effectiveness of the leadership as pertains to instruction.

Academic expectations have six subcategories and poses questions regarding the rigor of the academic curriculum, such as “Do students support their answers with evidence?” “Do all teachers take responsibility for literacy skills in your school?” and “Do leaders in the school have the necessary content knowledge and resources to support instructional practice across disciplines?” Career progression has four subcategories. The questions range from “Are there opportunities to advance in your school?” “Are teachers that deserve promotions most likely to get them?” and “Does someone care about your career progression?”

School Operations has six subcategories and inquires if the day-to-day operations of the school run smoothly. Questions within the subcategories also include “Is the school building clean and maintained?” “Are the non-academic services for students well managed (busses, meals, etc.)?” and “When you need something at your school, do you know whom to ask?” Two other components of the Instructional Culture Index/Insight (ICI) Survey are hiring process and teacher retention. The hiring process has several questions regarding the hiring process and when they were hired. Teacher retention has three subcategories and explicitly asks if teachers are planning to leave this year or next year and if so why.

One of the subcategories of teacher retention also asks if leadership works hard to retain teachers and goes further by asking questions regarding the retention strategies that were being used (The New Teacher Project, 2016). There are also 11 custom inquiries on the survey that range from “A leader from my school helps me improve my lesson plans?” “I know the criteria that will be used to evaluate my teacher score” and “The training I have received on the new standards will improve my practice.”

The TNTP survey instrument (Instructional Culture Index/Insight Survey) has been accepted as a tool to measure instructional school culture in the school district under study.

Researchers from the RAND foundation, which is highly respected as a research entity, found the instrument to be valid and reliable based on the data that showed some reasonable variation, but most Instructional Culture Index/Insight Survey scores and subcategories within the domains were skewed toward the higher end of their scale scores (Yuan & Schweig, 2016).

The estimated reliability of school-level domain scores was very significant in determining the validity of the Instructional Culture Index/Insight Survey instrument. The researchers ranged the reliability of the instrument from 0.77 to 0.91 (Yuan & Schweig, 2016). The validity and reliability were studied using data from sources related to the schools in which the survey was given. Follow-up interviews and other qualitative data points were used to make this determination. The objective was to compare school/s to other Title I schools with similar demographics in order to note increases or decreases in the school's overall Instructional Culture Index/Insight Survey (The New Teacher Project, 2016).

Additionally, increases or decreases in student proficiency, growth, and the school grade were noted. Addressed through the research in the study is the connection between student achievement, achievement gaps, student culture, and its impact in Title I learning communities. School culture positively impacts learning communities and stakeholders, thus improving the quality of life for many directly and indirectly (Khalifa et al., 2016).

Instructional planning for student growth. Instructional planning is one of the core tenets of highly effective teaching practices. For students to have the most rigorous, consistent, and meaningful education, educators must plan accordingly for students to grow academically. Andrews-Larson et al. (2017) introduced the concept called *teacher collaborative time* (TCT) after conducting a four-year study in low-income schools with teachers who taught math curriculum. In short, the researchers concluded that adequate time observing and analyzing

student data coupled with collaborative, instructional planning can increase the likelihood of student growth (Andrews-Larson et al., 2017). Instructional planning for student growth is a key ingredient when creating a recipe to ensure student success.

Learning Environment

The learning environment is a critical element in achieving high student success. Faculty, students, and staff must see the learning environment as a place that is conducive for success. If the learning environment is not safe, not welcoming to all stakeholders, and not structured for learning, the educators cannot teach and students cannot learn. Parental support is a hallmark of a great learning environment. Research suggests that a strong learning environment is greatly dependent upon the support of parents in the learning process (Park, Stone, & Holloway, 2017). Research shows a positive learning environment is made up of those who feel a strong sense of self-worth within the learning environment (Cushman & Cowan, 2010). The feeling of being valued as an asset in a learning environment helps promote a robust instructional school culture and climate.

Career Progression

Career progression is important in virtually all fields that provide some opportunity of potential vertical or horizontal movement in the work environment. However, not every educator wants to become an administrator. For those who want to explore administration, it is critical that they understand that the opportunity is available to them if they so wish. To obtain the title of an administrator, it is necessary to meet the criteria. Some educators may want to become specialists, coaches, or ascertain other positions that enhance teacher capacity, student achievement, and academic advancement.

Career progression also refers to professional development and the opportunity for educators to progress professionally as educators (Watson & Bogotch, 2016). Professional development ultimately offers the opportunity for educators to advance or progress in whatever capacity that suits their personal, professional, or career goals (Lopez, 2015); and ultimately a great instructional school culture is dependent upon this virtue being present within the learning community.

Evaluation and Observation/Feedback

In this era of high-stakes academic accountability, teacher evaluation is a hot-button issue. On the Instructional Culture Index/Insight Survey (The New Teacher Project, 2016), evaluation and observation/feedback have separate domains; however, they are interlinked in the world of academia (Kane, Kerr, & Pianta, 2014). According to Kane and associates (2014), teaching and learning does not improve in any capacity if strategic observation, feedback, and evaluation practices, based on accurate assessments, are not the norm in educational practices. According to the researchers, most teachers understand that accountability is needed; they just want to make sure the system is fair and unbiased. In schools that have a great instructional school culture, teachers receive consistent feedback based on observations, understand the evaluation system and components therein, and feel that the evaluator and the evaluation system are fair and equitable for all (The New Teacher Project, 2016).

Peer Culture

Peer culture refers directly to the relationship amongst individuals within the learning community. This phenomenon refers directly to knowledge sharing and team collaboration amongst all stakeholders within a learning community. As it pertains to this research, peer culture focuses directly on teacher-to-teacher interactions and collaboration. If the peer culture is

made up of those who acknowledge the vision of the instructional leader and are committed to the mission, then there is a great peer culture centered on helping each other accomplish their goals. Research shows that teachers who collaborate effectively achieve more success for their students (Andrews-Larson et al., 2017), and ultimately improve the climate and culture of the learning environment within their respective learning communities.

Academic Expectations

Research shows that conundrum exists amongst educators on exactly what academic success denotes (Brown, & Goldstein, 2013; Kane et al., 2014; Kleickmann et al., 2016). Based on a study that was conducted by Brown and Goldstein (2013), two ideologies exist amongst educators regarding academic expectations. The first approach is that a student is academically successful if he or she can master the standards. Another train of thought is based solely on the individual academic growth and progression of a student. Essentially, educators have different opinions on the idea of student growth, whether it is the idea of expectations of a student or student proficiency as the expectation. Though educators may differ on the definition of academic success, there is no debate that academic expectations are dictated by the instructional and academic goals for each student.

School Operations

School operations are directly related to organizational development and organizational structure (Schmuck et al., 2012). The researchers concluded that the success or failure within a learning community is directly indicative of the organizational structure that is implemented by the leadership of the organization. Additionally, the leadership must create buy-in from all members within the organization for the operation to run smoothly. Based on the research from

Schmuck and colleagues (2012), it could be argued that a thriving instructional school culture in a school that operates flawlessly is mutually inclusive.

Leadership Styles

Three main leadership styles permeated the learning communities that researchers studied in Turkey: transactional leadership, laissez-faire leadership, and transformational leadership (Aydin, Sarier, & Uysal, 2013). The overarching goal of the transactional leader is to accomplish specific goals within the organization (Aydin et al., 2013); however, the means by which these goals are accomplished greatly affect the culture of the organization. If all stakeholders are not included in the growth process, the perceived value of those within the organization decrease that likely lessens productivity (Schmuck et al., 2012).

A correlation between the laissez-faire leadership style and the perception of a weak or dull instructional school culture was found in research studies (Rowold & Scholtz, 2009). The reason for the lackluster instructional school culture was evident by the lack of leadership that describes a laissez-faire style of leadership. Essentially, in a laissez-faire system, there is no leadership; thus there is no direction and those that are within the organization are bound to be lost.

An effective leader is a transformative leader, and this type of leadership is necessary when trying to build a robust student culture. To balance the overall mission and a person's perspective as it pertains to the end goal, it is important to understand the *weltanschauung* (worldview) of their team members and utilize their workers' experiences and perspectives in order to transform those that follow their leadership (Aydin et al., 2013).

Professional Learning Communities, Professional Development, and School Culture

According to Lopez (2015), professional learning communities and professional development are keys to improving instructional school culture in several of the case studies that he examined. The professional learning communities seem to be the cornerstone of a great and thriving instructional school culture. Lopez (2015) would argue that school culture and the efficiency of the professional learning community dictate the outcome as it pertained to student proficiency and achievement.

The professional learning community consists of many different stakeholders within a learning center. Rigelman and Ruben (2012) felt strongly that even with overwhelming evidence that collaboration amongst educators yields the best results for students. Most educators work in isolation and in doing so do not build capacity as it pertains to a thriving instructional school culture. Rigelman and Ruben (2012) conducted observations on almost two dozen teacher candidates; they were able to conclude that the candidates' collaboration with other educators and their commitment to become in concert with the overall theme of maximizing each student's potential led to a higher caliber of educator. The results of partnerships amongst educators at the college level and school level contribute significantly to the success of teacher candidates (Rigelman & Ruben, 2012).

By having these highly effective coaches, the teacher candidates were able to do a variety of self-reflections on their practice and pedagogy. Though the research was conducted on a teacher education program, the applications of the research were still relevant to novice and veteran teachers already facing the day-to-day rigors of educating our youth. The underlying theme is that collaboration amongst quality educators produces the professional learning

communities necessary to drive school culture and climate in our most needy schools and districts (Simon & Johnson, 2015).

Moreover, an abundance of resources should be committed to achieving a plethora of learning communities that enhance the capacity of all educators within the learning environment and ultimately increase student achievement in every area (Brown & Goldstein, 2013).

Additionally, for this to take place all stakeholders must be committed to indulge in a culture of knowledge sharing within their schools, districts, and departments (Brown, 2011). The instructional leaders within these learning centers must provide the adequate support time and resources necessary to accomplish said goals. This cannot be done in isolation and must be the effort of many to the same commitment of student achievement (Rigelman et al., 2012).

Another study by Huffman, Hipp, Pankake, and Moller (2014) focused on schools that had a high level of readiness (HLR) and low level of readiness (LLR). Huffman et al. (2014) focused on staff readiness, leadership, and overall professional development. This study was conducted over a five-year period and was sponsored by Southwest Educational Development Laboratory (SEDL) in Austin, Texas. After studying baseline data from schools that utilized professional learning communities, it was evident to the researchers that schools that did not utilize professional learning communities did not affect higher student achievement.

The researchers involved in this unique study discussed the importance of professional learning communities and the need to consistently implement the practices contained within a school (Huffman et al., 2014). Professional learning communities serve a great purpose in education. It is simply inconceivable to believe that uniting behind a common purpose would not benefit any learning organization greatly (Huffman et al., 2014). For example, when physicians have patients who have unique health problems, the physicians come together and

utilize all their resources to address the health problem. The same ideology is pertinent to educators within a learning environment. When all share a common purpose, utilize their resources, and engage in proper discourse, the results are infinitely possible (Schmuck et al., 2012).

Student Achievement in High-Poverty Schools

Educators must look at elements outside of the confines of the traditional classroom and understand the overall challenges of the demographics in which they serve (Ullucci & Howard, 2015). A study that was conducted by The National Center for Children in Poverty (McCarty, 2010) highlighted a consistent increase in poverty in the United States of America. With the population becoming more impoverished, the challenges for educators become increasingly daunting. When looking at children in poverty educators have been tasked to educate, every facet of the child should be looked at (Hair et al., 2015).

One critical problem in neighborhoods that are well below the poverty line is the constant mobility among families. Student achievement is greatly affected when children are constantly being displaced due to the lack of financial resources by the parents (Ullucci & Howard, 2015), which ultimately decreases the ability of students to contribute to a positive and vibrant instructional school culture. Teachers who teach in low-income areas need to be culturally aware and sensitive to traditions and practices within the communities they serve (Ullucci & Howard, 2015). Being culturally ignorant in an environment that is already challenging is a recipe for disaster (Ullucci & Howard, 2015). Some researchers have concluded that many teachers in highly impoverished communities have little to no understanding of what it means to live in poverty (Ullucci & Howard, 2015).

Living in poverty does not necessarily equal low student achievement. However, research shows that the likelihood of students performing at a higher level, as compared to their counterparts with more resources, is not as likely (Ullucci & Howard, 2015). Many of the homes of these children in poverty have working parents or a working parent. Yet, the wages are stagnant and do not provide enough means to adequately support the family. Ullucci and Howard (2015) stated emphatically that an educator should focus on what a student can do as opposed to what they do not have.

Teacher turnover has increased dramatically in public schools in the United States of America (Simon & Johnson, 2015). This factor alone greatly affects student achievement in high poverty areas. The research shows that the highest teacher turnover occurs in the most socioeconomically challenged schools and districts (Simon & Johnson, 2015). Brown's (2011) studies have shown how important quality teachers are for students in high poverty areas. His research indicated that students in impoverished areas can achieve massively by having committed and knowledgeable educators with research-based strategies in the classroom delivering the instruction to the students.

According to the many different scholarly reviewed articles, researchers have conflicting views on school culture and its effect on student achievement (Khalifa et al., 2016). Some studies do not establish a direct link between instructional school culture, school leaders, and student achievement. In their research, Sun, Levey, and Vaux (2015) looked at various aspects of student achievement and focused their research on a data-driven culture and surmised that this did not fully increase student achievement.

It has been stated that student success is solely dependent on individual student efforts as opposed to the factors such as great leadership and a great instructional school culture (Louis,

2015). However, other research studies indicated that an effective leader does ultimately increase school culture and increase student achievement. Teachers and students together determine the school culture along with the outcome (Newman, 2014). Effective organizational development, thereby, increases instructional school culture and student proficiency (Gurr & Drysdale, 2016; Louis, 2015; Mulford, 2014; Newman, 2014; Watson & Bogotch, 2016).

Gurr, Drysdale, and Mulford are leaders in the field of school culture and student proficiency, and their argument was rooted on the effectiveness of the leader; that the school culture and student achievement are dependent on the instructional leader. Principals and schools included in Gurr's (2015) research were selected using one or more of the following criteria: schools having the classification of Title I status, evidence of student achievement beyond expectations on state or national tests, where this evidence exists; or principals' exemplary reputations in the community and/or school system. This could be gained through consultation with system personnel or other principals, school inspection reports, and so forth. Other indicators of success were more context-specific, such as the overall reputation of the school and awards for exemplary programs (Gurr, 2015).

Data collection methods in Gurr's (2015) study included individual interviews with principals, senior staff, and school board members; group interviews with teachers, parents, and students; and analysis of appropriate documents. Observation of the work of principals and the functioning of their schools were part of the case studies in which principals were revisited to explore the sustainability of success after five years (Gurr, 2015). There were several perspectives on the driving factors that produced high-achieving and high-performing students and a robust instructional school culture.

Researchers have not been quick to identify one single factor acting in isolation as the overall reason for achieving great student success within a vibrant culture. It could be logically hypothesized that it is a combination of the instructional leader, the educators within the learning community, and the systems that are in place as a whole. Louis' (2015) research concluded that the instructional leader had some impact on instructional school culture in student achievement, but others who were more directly linked to the students dictated the levels of student achievement within the learning environments.

The International Successful School Principalship Project (ISSPP) has been painstakingly conducting valuable research about the work of highly effective principals since 2001 (Gurr, 2015). Research efforts continued in order to adequately address the ever-changing needs of our most challenging learning environments. Data from four project books and eight models derived from this research were strategically and systematically integrated into a model of successful school leadership (Gurr, 2015).

The work of the school leader ultimately dictates the output from the educators in their organization and uniquely affects the outcomes of the learning community as a whole (Gurr, 2015). It was found that student achievement was solely reflective of the ability of the instructional leaders to sell the vision and create buy-in, increase capacity, encourage knowledge sharing, and build relationships with the educators within their school (Gurr & Drysdale, 2016). Leaders are uniquely proficient at organizational development and knowledge management. Effective instructional leaders look at the stakeholders who make up their organizational structure and utilize their skills to effectively yield the best results for students within their learning community (Gurr, 2015).

Even though it can be argued that the instructional leader sets the tone of the teacher, the educator ultimately has the most impact on student outcomes (Louis, 2015). The instructional leader cannot act in isolation as it pertains to building capacity and building a solid instructional school culture; they need the support of other stakeholders such as parents, business leaders, and those who have a vested interest in the outcome of the school within their community (Aydin et al., 2013). In comparison, the hierarchy of organizations with successful profit-rich businesses is consistent as to efficient methods of leadership (Schmuck et al., 2012). Effective leadership practices yield desired results in most organizations (Schmuck et al., 2012).

This ideology of successful businesses and highly effective leadership holds true in nonprofit organizations as well (Shmuck et al., 2012). It is very important to define the term *instructional leader* because this term could easily apply to the educator in the classroom as well. Researchers surmised that instructional leaders dictate the outcomes of their learning community (Louis, 2015). An argument could be made that the instructional leader is, in fact, the person leading instruction in the classroom. This could give credence to the construct that supports the ideology that states the teachers within a learning community ultimately dictate the instructional school culture and determine student achievement (Louis, 2015). Essentially, there are instructional leaders at many levels within a learning community.

The International Successful School Principalship Project (ISSPP) concluded that there is no single set of skills in a leader that creates a robust school culture within a learning community. Gurr (2015), who used the ISSPP tool, emphasized the role of the instructional leader and his or her ability to create the environment necessary to produce high achieving educators and students. Gurr (2015) related there were nine consistent themes or characteristics of highly effective leaders that were studied: the ability of the principals to distribute leadership

roles, core leadership practices, heroic leadership, capacity development, trust and respect, continuous learning, personal resources, context sensitivity, and sustaining success.

Not all of the leaders in Gurr's (2015) study exemplified every individual quality aforementioned; however, research does show that many of these elements were present in the leaders who set up the systems that produced high achievers and a large student-centered culture. Some schools changed leaders and were able to continue success or even excel. This notion supports the premise that the systems in place, not the leader, effectively dictate the instructional school culture. However, this did not change the perspective of some researchers because it can be argued that leaders implement the systems that are in place (Gurr, 2015).

Review of Methodological Issues

A correlational study analysis approach was used to conduct this study. The term *correlation* in the field of statistical research refers to the linear relationship associated with two or more variables. The strength of the relationship is represented numerically from -1 to $+1$. The stronger the relationship, the closer the value is to $+1$ (Mukaka, 2012). A correlational study analysis approach was used to conduct this study. The term *correlation* in the field of statistical research refers to the linear relationship associated with two or more variables. The strength of the relationship is represented numerically from -1 to $+1$. The stronger the relationship, the closer the value is to $+1$ (Mukaka, 2012).

Quantitative data, assessable through district and state channels, was used for this study. That is, the data being used in this study were all archived data. Data used to answer the question of how school culture impacts student achievement in an urban school district in elementary schools in third, fourth, and fifth grades on standardized tests included TNTP's Instructional Culture Index/Insight Survey data from the district.

The Instructional Culture Index/Insight Survey is a reliable measure of a school's instructional culture (Yuan & Schweig, 2016). It serves as a leading indicator of both teacher retention and student achievement. The index is used to identify schools with strong instructional leadership practices. Schools referred to throughout this survey report were Top Quartile Schools, making it possible for schools to check on peers who demonstrate best practices. The index is calculated from three survey items, which are identified by the note *Index* throughout the report, and is reported on a scale from 1 to 10 (The New Teacher Project, 2016). This is necessary because the TNTP data are based on the perceptions of the teachers within the learning community only. Previous researchers have vetted the Instructional Culture Index/Insight Survey and found it to be valid with a reliability rate up to 91% (Yuan & Schweig, 2016). Research was conducted in the past that utilized similar descriptive statistics analysis and regression analysis, from which the researchers were able to formulate a strong argument for their findings by gauging perceptions of the learning environment according to the Instructional Culture Index/Insight Survey (Brown, 2016; Lopez, 2015).

Synthesis of Research Findings

Leadership styles are extremely important in creating a school culture that produces academic achievement in schools (Aydin et al., 2013). There may be several studies related to this topic, but almost none focused on the leadership styles in distinguished Title I schools (Newman 2014). This information must be presented in a method that gives the research validity and reliability.

Many schools that are low performing in socio-economically challenged areas tend to lack a robust instructional school culture (Gurr, 2015). The stakeholders only mirror the sentiments and attitudes being disseminated from the school. Consequently, the school lacks

support from the community if the instructional leader is not utilizing the theories regarding organizational development and knowledge sharing to promote positive instructional school culture and climate (Hau et al., 2013; Newman, 2014).

The goal of organizational development (OD), as conceptualized by Schmuck and colleagues (2012), is to implement a planned effort that focuses on improvement and changing norms, structures, and procedures, while using various methods to assess the observations and happenings. Organizational development and great school culture are apparent in Title I learning communities at the elementary school level that have high-performing students (Brown, 2011). To change to norms, culture, roles, structures, and procedures so that a school or college can become self-renewing and sustainable on a continuous basis, the instructional leader must keep three goals in mind: organizational adaptability, individual motive satisfaction, and effective work groups (Schmuck et al., 2012).

Organizational adaptability includes making a meaningful organizational system and structure that promote success. An organizational design comprises the overall structure and framework and adjusts the schematics of any system within a learning community (Schmuck et al., 2012). Another component of organizational adaptability involves Target System Participants. When addressing the Target System Participants, the importance of having even lower-level employees involved in the sub-group or decision-making team cannot be understated. As to effective work groups, everyone involved in the day-to-day success of the learning community should be represented in the subgroup that helps make decisions necessary to further the school. This means that administration, teachers, office staff, custodians, and cafeteria staff should have some representation in the decision-making process if it is to be a success (Schmuck et al., 2012).

Systemic development depends on every aspect of the organization being involved in the overall overhaul of the organization. All of these factors can determine the productivity of instructional school culture and climate that can be measured using the Instructional Culture Index/Insight Survey (Schuck et al., 2012). Leaders must differentiate the training according to the needs of the employee and the mission of the organization (Hislop, 2013). In a great system, the leaders help develop the employees from where they are, *instilling in the employees satisfaction as to their work*.

Principals or instructional leaders develop teachers accordingly. This means that they structure the organization to bring about *effective work groups* in a way that promotes success (Schmuck et al., 2012). The principle of readiness allows an individual to take a leap in order to help the organization as long as the jump is not too far and does not leave the individual feeling hopeless if he or she falls short of the goal (Shmuck et al., 2012). Essentially, workers within the organization do not fear extending themselves past their comfort zones to help the organization succeed. These factors must be highly considered when addressing the Target System Participants, which can greatly affect school culture and climate; and in doing so drastically affect instructional momentum and outcomes (Schmuck et al., 2012).

An educational organization's culture has to do with the faculty and staff's feelings about being part of the learning community, the state of interpersonal relationships, the level of motive satisfaction, and shared feelings of success or failure (Shmuck et al., 2011). All factors must be considered in creating the optimal plan for the organization to start the process of organizational development. The measure of the instructional school culture in a Title I school is the direct result of the organizational development plan and the implementation of the plan (Schmuck et al., 2011).

There is a need to look at the link between leadership styles, instructional school culture, and student achievement (Tatum, 2010). Stakeholders, whoever they are, must look at the school setting and create a system that effectively promotes student achievement and culture.

Ultimately, the change leader or instructional leader of the learning community focuses on changing the practice of the knowledge workers within their learning community; in doing so, the instructional leaders change the beliefs of the members within the organization (Schmuck et al., 2011). Organizational development determines the school's culture and ultimately determines the school's success (Schmuck et al., 2011).

Critique of Previous Research

Instructional school culture and student proficiency are interlinked and are not mutually exclusive of each other in most cases (Gurr, 2015). Research on educational organizational structures is extremely limited in quantity and must be used to inevitably identify the necessary frames, be it structural, human resource, political, or symbolic (Moller et al., 2013). The necessary frames are critical in identifying the systems or strategies necessary to implement effective school culture that is sustainable and indicative of high-performing students.

Demographic information was not included in many of the studies and for this reason, there is a need to be critical of the previous research as it pertains to school culture and student achievement in Title I schools in third, fourth, and fifth grades (Moller et al., 2013).

Louis (2015) claimed that the instructional leader ultimately has no direct impact on student outcomes and the outcomes are essentially the result of teachers' efforts. However, Gurr (2015) refuted this by reasoning that the instructional leader dictates policy, creates the vision, and develops the mission that ultimately promote behaviors within the faculty and staff who dictate culture and student outcomes. Children are generally the byproduct of their parents, as

teachers are generally the byproduct of their instructional leaders. The argument for children being a byproduct of parents remains the same for students being the byproduct of their teachers.

The systems put in place are dictated by the instructional leader and determine the strength or weakness of the learning community (Lopez, 2015). It is extremely difficult to argue that the instructional leader has little to no effect on the school as a whole. Based on the research that has been conducted in various schools with enormous challenges, the school leader plays an integral part of success of the educators and the students (Lopez, 2015).

There are methodological issues with the International Successful School Principalship Project (ISSPP) study that has been collecting research for several years. The research methods used have not been widely challenged by other researchers. The methods of data collection involving the ISSPP are based on surveys, observations, interviews, student and school achievement reports, and analysis of documents related to each specific learning environment in question (Gurr, 2015).

Issues can be found with the survey and interview data as to how the information was ascertained and analyzed, which can be extremely subjective as opposed to objective. However, a logical inference can be made to debunk the idea of being extremely subjective when survey data and interview data are coupled with standardized test data from credible sources such as the district or state education overseers. The overarching research shows there is a positive correlation between student culture and student achievement (Gurr, 2015).

Gurr (2015) used survey and interview data as tools, which are often used by researchers to qualitatively analyze school culture and ultimately give strategies or interventions that could be used to help improve student culture. Gurr (2015) and Huffman and colleagues (2014) concurred that the leader directly affects the outcome of a learning environment. Fundamentally,

leaders drive instructional school culture and determine the culture of the learning community through their actions.

There are many inconsistencies in instructional school culture and student achievement and the structure of a learning community ultimately determining the school culture and student achievement (Louis, 2015; Sun et al., 2015). Some researchers strongly believe that school leaders have the least effect on student outcomes and that the educators create the culture within their classrooms and influence student achievement. Thus, teachers ultimately dictate the school culture (Louis, 2015).

The instrument used to measure instructional school culture is a survey that quantifies the areas being measured that dictate instructional school culture. The New Teacher Project (TNTP) created an instrument called the Instructional Culture Index/Insight Survey, which is a survey that uses 10 domains that relate directly to instructional school culture and uses quantitative data to create interventions that assist in increasing student culture. The ICI was created by The New Teacher Project after conducting extensive research and finding the current system of education at the time to be grossly ineffective and in need of a major transformation (The New Teacher Project, 2016).

The New Teacher Project (TNTP; 2016) needed a tool that could compile usable information on any given learning institution through data collection and analysis and provide usable qualitative and quantitative data that could be used to identify the causes of low achievement and provide necessary interventions within the school to improve student outcomes. The model is widely used and is implemented in many schools and districts. The ICI survey instrument was validated and deemed reliable by the RAND Corporation in 2016 after a few years of internal analysis and revisions by TNTP (Yuan & Schweig, 2016).

More importantly, the leadership of the TNTP organization asked the RAND Corporation to conduct the research on the ICI survey. The RAND Corporation analyzed achievement data and demographic data from four large school districts that participated in the ICI survey from 2011 to 2014. The researchers analyzed domain and subdomain scores from the survey and concluded that the results were representative of the schools that had taken the ICI survey. The instrument was deemed reliable and valid when the researchers analyzed the survey results, interviews, and student data. Yuan and Schweig (2016) concluded that the survey was anywhere from over 70% to over 90% reliable.

Additionally, the researchers concluded the small variations in scoring did not rise above any threshold that would initiate concern. In doing this, a clear link between the Instructional Culture Index/Insight Survey, school culture and climate perception, and teacher retention was established. This was based on the teachers' beliefs on instructional school culture and climate that are divided into 10 critically important domains that make up the Instructional Culture Index/Insight Survey (Yuan & Schweig, 2016). The domains are learning environment, instructional planning & student growth measures, observation and feedback, professional development, evaluation, peer culture, leadership, academic expectations, and school operations. These are key elements that can help determine the culture of a school (The New Teacher Project, 2016). This instrument has been used with thousands of teachers in several states and districts.

Based on the research that exists, a strong argument could be made that instructional school culture directly affects student achievement; however, some of the research shows inconsistencies in correlation between student achievement and student data (Louis, 2015). Yuan and Schweig (2016) were not able to find a definite correlation between Instructional

Culture Index/Insight Survey data and student achievement. However, this does not mean the relationship does not exist in Title I public elementary schools.

The lack of research pertaining to Title I schools, instructional school culture, and student achievement has created a gap that needs to be filled with quality research involving our most challenged learning communities and environments (Brown, 2011). Essentially, research on instructional school culture and student achievement as pertains to Title I elementary schools is very limited and warrants further research. This is important because high quality education for students break the cycle of poverty that is prevalent in many struggling communities (Brown, 2011).

Summary

Three main constructs exist: (a) The leader dictates instructional school culture; (b) teachers dictate instructional school culture, or (c) the systems that are set up dictate instructional school culture (Adams et al., 2016; Gurr & Drysdale, 2016; Louis, 2015).

Researchers such as Gurr and Drysdale (2016) believed that the instructional leader is ultimately the deciding factor who determines instructional school culture by his or her actions as it relates to the strategies, systems, and relationships created and implemented within the respective learning environment. Organizational development and organizational structure contribute to establishing a culture that is conducive for success (Schmuck et al., 2012). It is incumbent upon the educational leaders in a school or district to create an environment that embraces the fundamentals of knowledge management and understands the importance of knowledge sharing (Hislop, 2013). By holding the concept of knowledge sharing as a building block of a thriving and meaningful instructional school culture, knowledge workers may be able to improve the

educational process and increase student achievement (Hau et al., 2013). All of these ingredients are included in a recipe that yields a positive instructional school culture and climate.

The New Teacher Project created an instrument called the Instructional Culture Index/Insight Survey that could measure the culture of a school based on 10 domains and subdomains that are able to be quantifiably and qualitatively analyzed and interpreted. The domains are learning environment, instructional planning and student growth measures, observation and feedback, professional development, evaluation, peer culture, leadership, academic expectations, and school operations (The New Teacher Project, 2016). TNTP later asked the RAND Corporation to check the reliability and validity of the instrument and concluded that the instrument was, in fact, both reliable (up to 91%) and valid as to ascertaining the culture of a school (Yuan & Schweig, 2016).

There are three leadership styles that are included in this review of literature. The styles were laissez-faire leadership, transactional leadership, and transformational leadership (Aydin et al., 2013). The laissez-faire approach to leadership proved to be extremely ineffective, as this style of leadership essentially has no leader. The transactional leaders did get some things accomplished: however, they did it by any means necessary and ultimately hurt the culture of their school (Gurr, 2015). Research has shown that transformational leaders increase instructional school culture and the communities they serve because they focus on transforming all of those within their learning community into assets that push the vision, mission, and goals of their organization (Aydin et al., 2013).

Professional learning communities are another cornerstone of a great and thriving instructional school culture. When the collaboration within a professional learning community is ingrained in the stakeholders who make up the organization, high achievement and sustainability

are soon to follow (Huffman et al., 2014). The importance of knowledge sharing cannot be undermined between individuals in a school or district (Huffman et al., 2014). This is fundamentally critical when working in our most challenging communities because the obstacles are abundant and need a collaborative effort to surpass them. Given the high turnover rate amongst educators in these most needy communities, the instructional leader must create an environment of professionals and professional learning communities to build an instructional school culture capable of producing high achievers with continuity (Lopez, 2015).

Many scholars hold different ideologies on the relationship between instructional school culture and student achievement. There are some who would argue that the relationship between instructional school culture and student achievement is menial at best; moreover, the pedagogical culture of the teacher alone would determine instructional school culture (Moller et al., 2013). However, it can still be argued that the theoretical approach the researcher takes regarding the factors that influence instructional school culture most directly (leadership, teacher, or organizational structure) may ultimately determine their conclusions as it pertains to student achievement and school culture (Adams et al., 2016; Gurr & Drysdale 2016; Louis, 2015). The researcher associated with this study would argue that it is a combination of all factors.

This could be a viable argument against the positive correlation of school culture and student achievement if research showed a quantifiably and qualitatively low culture based on teacher and student perceptions and the school was still high performing compared to other schools (Sun et al., 2015). However, this would have to be the norm in many case studies and the overwhelming majority of research simply does not support it. Though more research is needed in the area of culture and student achievement, the majority of researchers see some relationship between the two (Gurr, 2015).

Chapter 2, this chapter, covers the conceptual framework and review of literature regarding the hypotheses that the perceptions of school culture, as measured by the 10 domains that compose the Instructional Culture Index/Insight Survey, and student achievement are interlinked and may be predictors of student achievement in Title I elementary schools on standardized tests. In the next chapter, Methodology, the purpose of the study is explained again. The research questions and hypothesis are revisited as well as key details of the research design, target population and sample, data collection and instrumentation, operationalization of variables, data analysis and procedures, limitations and delimitations, internal and external validity, expected findings, and ethical issues, ending with a final summary, are thoroughly analyzed in Chapter 3.

Chapter 3: Methodology

This correlational study was designed to assess if there was a relationship between school academic performance rating scores and instructional school culture scores by school for the school years from 2015 to 2016 and from 2016 to 2017. School culture was defined as comprising the values and norms of the school or organization (Heck & Marcoulides, 1996; as cited in MacNeil et al., 2009; Hoy 1990). This is important because instructional school culture has been shown in some studies to be related to student achievement (Newman, 2014).

This study adds to the research studies that focused on understanding the interactions of school culture on the learning environment, such as The New Teacher Project (TNTP) and the Rand Foundation. The Rand Foundation has invested time and energy in research that sought to understand the interactions of instructional school culture on the learning environment. TNTP developed an instrument called the Instructional Culture Index/Insight Survey that measures the instructional school culture within a learning community.

Although researchers have studied the relationship between school climate, culture, and school achievement (Thapa et al., 2013), few studies have addressed the effect in economically challenged school districts or Title I elementary schools (Kutsyruba et al., 2015). Therefore, there is a need to examine instructional school culture specifically as it relates to student achievement in socioeconomically challenged elementary schools and school districts. This study addressed this gap in the literature and examined the relationship between instructional school culture and student achievement in an urban school district. A bivariate correlation analysis or Pearson correlation was used on all elementary schools in an urban school district on student achievement and instructional school culture for the school years 2015 to 2016 and 2016 to 2017.

Purpose of the Study

The purpose of this correlational study was to statistically analyze the relationship between instructional school culture, as measured by the Instructional Culture Index/Insight Survey, and student achievement as measured by school performance composite scores for the academic years 2015 to 2016 and 2016 to 2017. Data from the quantitative data analysis provided by the TNTP's Instructional Culture Index/Insight Survey and the school academic composite scores were gathered from each school's statewide standardized tests scores. This study adds to the limited research on the relationship between instructional school culture and student achievement in elementary schools in an urban area.

Research Questions

This study addressed the correlational relationship between instructional school culture and student achievement. Two years of data were analyzed that included the Instructional Culture Index/Insight Survey and a composite of the scholastic scores of the students. To find answers as to the correlation, the study was designed to answer the following research questions.

- RQ1. What is the correlational relationship between instructional school culture as measured by the Instructional Culture Index/Insight (ICI) Survey and student achievement as measured by school performance composite scores for the academic school year 2015-2016 in an urban school district?
- RQ2. What is the correlational relationship between instructional school culture as measured by the Instructional Culture Index Survey (ICI) and student achievement as measured by school performance composite scores for the academic school year 2016-2017 in an urban school district?

Research Hypotheses

Hypotheses were generated to answer the above research questions. The hypotheses consist of sets, one known as the null hypothesis and one known as the alternative hypothesis. The following null hypotheses (H_01 and H_02) and alternative hypotheses (H_11 and H_12) were used to aid in answering the two research questions. In this study, both null hypotheses were rejected.

H_01 : There is no relationship between instructional school culture as measured by the Instructional Culture Insight Survey (ICI) and student achievement as measured by school performance composite scores for the academic school year 2015 to 2016.

H_11 : There is a relationship between instructional school culture as measured by the Instructional Culture Insight Survey (ICI) and student achievement as measured by school performance composite scores for the academic school years 2015-2016.

H_02 : There is no relationship between instructional school culture as measured by the Instructional Culture Insight Survey (ICI) and student achievement as measured by school performance composite scores for the academic school year 2016 to 2017.

H_12 : There is a relationship between instructional school culture as measured by the Instructional Culture Insight Survey (ICI) and student achievement as measured by school performance composite scores for the academic school year 2016 to 2017.

Research Design

Regarding the factors that are connected with school culture and Title I elementary schools, there have been few investigations evaluating how school culture and student academic outcomes are related or interact. A correlational research design was used in this study to determine the relationship between two or more sets of data (Tuckman & Harper, 2012, p. 186). A correlational research design was appropriate for this study because it showed the statistical significance amongst the variables (Curtis et al., 2016). This research design reveals empirical quantitative data that creates insight as to the type of relationship shared between instructional school culture and student achievement in elementary schools in an urban district. The two sets of data stem from the Instructional Culture Index/Insight Survey and composite academic scores of the students for two academic school years (2015 to 2016, and 2016 to 2016). Both sets of data were available on the school district's website.

This correlational study used the Pearson correlational study model (bivariate correlational analysis) to test the strength and direction of the relationship between two variables, instructional school culture as measured by the ICI and student achievement as measured by student achievement composite scores. The independent variables were school culture and Title I elementary schools and the dependent variables were the composite third, fourth, and fifth grade math, English, and Language Arts tests, and fifth grade science standardized tests. For this study, the examiner reviewed the correlation of the relationship between school culture in Title I schools and the results of third, fourth, and fifth grade standardized math, English, Language Arts, and fifth grade science tests.

Curtis and colleagues (2016) contended that a correlational study was very important in scientific inquiry and helped to advance society by studying the relationship between variables.

Correlations amongst variables can be measured with the use of different indices or coefficients (Hauke & Kossowski, 2011). The three primary correlational analyses instruments are Pearson's coefficient (r), Spearman's rho coefficient (r_s), and Kendall's tau coefficient (τ ; Hauke & Kossowski, 2011). The most common correlational coefficient, Pearson's coefficient of correlation, was utilized to test the strength of the linear relationship.

The Pearson correlation analysis determines if there is a positive or negative relationship amongst student achievement and instructional school culture in elementary schools in an urban school district. Correlation is a technique for investigating the relationship between two quantitative, continuous, or on-going variables. Examples are age and cholesterol levels. Pearson's correlation coefficient (r) is a measure of the strength of the association or statistical significance between the two variables (University of the West of England, 2018, p. 1). There is then the underlying assumption that the data were from a normal distribution sampled randomly. If this is not true, the conclusions may well be invalidated. If this is the case, then it is better to use Spearman's coefficient of rank correlation for non-parametric variables (University of the West of England, 2018, p. 1). It is interesting to note that with larger samples, a low strength of correlation, for example $r = 0.3$, can be highly statistically significant (i.e., $p < 0.01$; University of the West of England, 2018, p. 1).

Bravais discovered this method of calculation in 1846, even though Person was the first to describe it in detail in 1986 thus making it more accessible (Hauke & Kossowski, 2011). Pearson's work illustrated why this method worked best to show the relationship between two variables or coefficients (Hauke & Kossowski, 2011). For this research, the Pearson correlation or bivariate correlation was the most effective in showing the statistical significance amongst the variables. The researcher used Pearson correlation analysis to determine if there was a positive

or negative relationship amongst student achievement and instructional school culture in elementary schools in an urban school district.

Target Population and Sample

The target populations used in this study were the students of the schools listed on the district's website that were surveyed by the Instructional Culture Index/Insight Survey and whose composite scores were accessible. Collectively, the schools represent approximately 200 students in the third through fifth grades. The target population was students attending schools located in the same southern urban school district. One sample of 98 schools was from high, average, and low performing elementary schools from a southern urban school district from the 2015 to 2016 school year. The second sample was from 95 high, average, and low-performing elementary schools from the same southern urban school district from the 2016 to 2017 school year. There were some schools that participated in both sample years. The data obtained from both sets of schools for both years were analyzed. Archived data as to students' composite scores from the State Department of Education and publicly accessible data from the Instructional Culture Index/Insight Survey were taken directly from the district's website within the southern school district. Because of the sample size of the population, generalization of the findings was not recommended beyond the scope of this study (Wargo, 2015).

Of the elementary schools studied from the 2015-2016 and 2016-2017 school years, roughly 70% of the schools were Title I. Over 90% of the students in the Title 1 elementary schools in the district were on free and reduced lunch. Also, the overwhelming majority of the parents of the students did not have a college degree and many did not have a high school diploma. The students from low-socioeconomic areas tended to be significantly behind grade level pertaining to reading. In most cases, students were behind at least one year and in some

cases, two or three years behind. The average fourth grade student reads below a third-grade level (Florida Department of Education, 2018).

Data Collection and Instrumentation

Two data sources were used: the student achievement composite scores for each school and the Instructional Culture Index/Insight Survey. The instruments are described below. The archived data, both the Instructional Culture Index/Insight Survey and the composite student scores, for the study were obtained through the district's web site with the permission of the district. In this study, data from 98 elementary schools for the school year 2015 to 2016 and data from 95 elementary schools for the 2016 to 2017 school year were collected. Test scores are taken from the Florida Department of Education Website. The New Teacher Project Instructional Climate Index is archived data that was taken from duvalschools.org. All data were archived data and available to the public.

Student achievement composite scores. The researcher for this study obtained all data from archived data on the website of the school district being researched, specifically from the State Department of Education. The Instructional Culture Index/Insight (ICI) Survey that was produced by TNTP was available on the website of the school district being researched. The data were gathered and matched to each elementary school in an urban school district. The composite scores for every elementary school in the state are comprised of proficiency and growth scores from third grade growth scores, for repeaters in ELA, third grade proficiency scores, fourth grade ELA proficiency and growth scores, fifth grade proficiency, and student achievement composite score ratings for Title 1 elementary schools' growth scores, the lowest quartile growth of each grade level, and fifth grade science proficiency.

Scores ranged from 1 through 5; proficiency is the score of a 3 or better on the assessments. The percentages of these scores were added up and a composite score was tallied. The scores were as follows: a composite score of 434 or more equals a school rating as A; 433-378 = B; 377-287 = C; 286-224 = D; 223 or less = F. High-performing schools are the A and B schools. C schools are average, and D and F schools are low performing. Only the numeric composite score was used in the bivariate correlation analysis instrument (Pearson correlation tool).

Instructional Culture Index Survey. The Instructional Culture Index/Insight Survey instrument was accepted as a tool to measure instructional school culture in the school district under study. Researchers from the RAND foundation, which is highly respected as a research entity, found the instrument to be valid and reliable based on the data that showed some reasonable variation. However, most Instructional Culture Index/Insight Survey scores and subcategories within the domains skewed toward the higher end of the scale scores (Yuan & Schweig, 2016).

The instrument Instructional Culture Index/Insight Survey, a tool that measures instructional school culture, was developed by The New Teacher Project (TNTP) in 2016. The tool gives each school a quantitative score up to 10. The lowest score is 0. The domain ratings were vetted by RAND researchers who utilized similar domains and subdomains as well when quantifying instructional school culture in a learning community (Yuan & Schweig, 2016). Researchers ranged the reliability of the instrument from 0.77 to 0.91 (Yuan & Schweig, 2016). The validity and reliability were studied using data from sources related to the schools in which the survey was given. Follow-up interviews and other qualitative data points were used to make this determination.

The internal consistency reliability of the ICI domains is Cronbach's alpha (Yuan & Schweig, 2016). In addition, after several administrations of the instrument over time and analyzing various periods using regression analysis, the researchers concluded that the instrument had consistent data. Results indicated that for all domains the correlations among domain scores were quite high, and all were above 0.5. The strongest correlations were between the two consecutive administrations and the weakest correlations were systematically between the most distant administrations (i.e., mid-year 2013 and end-of-year 2014; Yuan & Schweig, 2016).

The stability coefficients were summary measures of how stable the true levels of school-level summary scores were across the four waves of ICI administrations. The pair-wise correlation coefficients were generated based on observed scores. Together, the stability coefficients of and pair-wise correlation coefficients among the domain scores and the overall Instructional Culture Index/Insight Survey scores suggested that schools that received high scores in one administration were likely to receive high scores in other administrations (Yuan & Schweig, 2016).

Responses to the three items in the Instructional Culture Index/Insight Survey were first converted to a dichotomous variable before they were averaged to generate the Index score, 2 with responses of 4 (*agree*) and 5 (*strongly agree*) converted into 1, and the other responses converted into 0. Responses to these three items were treated as continuous variables when they were used to generate the domain scores for the peer culture, evaluation, and professional development domains. The Instructional Culture Index/Insight Survey score and the domain scores were transformed on a 0-to-10 score scale. Responses to the three items of the Instructional Culture Index/Insight Survey were first dichotomized into a value of 0 or 1.

ICI was based on teachers' perceptions of policy and ultimately how teachers felt the bar was being set in their learning community as the standard for educators. The higher the score, the better the instructional school culture. Categories on the assessment ranged from learning environment to observation and feedback to peer culture to school operations. The categories were presented with a 6-point Likert scale gauging the participants' responses.

The composite scores for every elementary school in the state were comprised from the proficiency and growth scores from third grade growth scores, for repeaters in ELA, third grade proficiency scores, fourth grade ELA proficiency and growth scores, fifth grade proficiency and student achievement composite score ratings for Title 1 elementary schools' growth scores, the lowest quartile growth of each grade level, and fifth grade science proficiency. Scores ranged from 1 through 5; proficiency is the score of a 3 or better on the assessments. The percentages of these scores were added up and a composite score was tallied. The scores are as follows: a composite score of 434 or more equals a school rating as A; 433-378 = B; 377-287 = C; 286-224 = D; 223 or less = F. High performing schools are the A and B schools. C schools are average and D and F schools are low performing. Only the numeric composite score was used in the bivariate correlation analysis instrument (Pearson correlation tool).

Operationalization of Variables

The operationalization of the variables referred directly to the key concepts of the research study. The Instructional Culture Index/Insight Survey scores were centered on the 10 domains that were utilized in the ICI to determine instructional school culture. The survey instrument for this study, the ICI, was based on teachers' perceptions of policy. Another basis was how teachers felt the bar was being set in their learning community as the standard for educators. The instrument measures the instructional school culture within any given learning

community and is based on a rubric style system. It is used by several school districts and some of the states include Florida, North Carolina, and Tennessee. The data collected within this system give a quantitative and qualitative perspective and analysis. Scholars, such as Thapa and colleagues (2013), used an extensive methodological process when they conducted their research on instructional school culture.

Five specific domains are associated with instructional school culture. They are safety, with an emphasis on physical safety; social and emotional safety and/norms; relationships, as they pertain to support; and respect for diversity, leadership, and compatibility. Another aspect is institutional environment, which pertains to the students' and teachers' perceptions of the physical environment. Last is school improvement, which focuses on vision, mission, and goals of the instructional leader as it relates to the school improvement plan. The school composite scores for elementary schools in the urban school district being researched changed annually and were based solely on the achievements of students within each school in third, fourth, and fifth grades.

Data Analysis and Procedures

Data analysis entails a very thorough examination of the data being collected and analyzed during the research process to ensure the research questions are answered, hypotheses are accepted or rejected, and all goals are met. The Pearson correlation analysis was used to determine if there was a positive or negative relationship among student achievement and instructional school culture in elementary schools in an urban school district. The correlation was significant at the 0.01 level (2-tailed). Sig. (2-tailed) determines if there is a statistical significance amongst the variables.

A researcher can conclude that statistical significance amongst two variables exist when the sig (2-tailed) value is equal to or less than .05. That means that increases or decreases in one coefficient or variable do relate significantly to increases or decreases in the other variable (Swank & Mullen, 2017). A cause-and-effect relationship is not established using this model.

The researcher in this study utilized a Pearson correlational test to determine r , which is measured from -1 to 1 . The higher the number, the greater the strength between the variables. The IBM Statistical Package for Social Scientists (SPSS), Version 25, instrument was used by the researcher to the determine the statistical significance between instructional school culture as measured by the Instructional Culture Index/Insight Survey and the elementary school composite scores in an urban school district as archived by the Florida Department of Education. The school years of 2015 to 2016 and 2016 to 2017 were used in this study.

Limitations and Delimitations

The limitations were that only one urban school district was used for the study. School composite scores and the Instructional Culture Index/Insight Survey data was only used from the years of 2015 to 2016 and 2016 to 2017. This represents only a small population that focuses on the curriculum subjects covered in this study. So it could be asked, “Are teachers accurately reporting their feelings regarding instructional school culture on the surveys?” “Is the student achievement data accurate?” “Are there any inconsistencies in the administration of standardized tests?”

There were some anomalies in the data. Some schools in the urban school district being researched rated low in school culture, yet they were above average in student proficiency in math and reading in third, fourth, and fifth grades. This phenomena produces outliers that affect the findings.

The Pearson correlation analysis has some limitations. There may be a lower r outcome even though the relationship may seem to be a strong relationship or association amongst the variables. Furthermore, there may be alternate relationships or biases amongst the variables that could yield a high or low statistical significance that may skew the final analysis of the research (Karras, 1997).

Internal and External Validity

The validity and reliability refer directly to the integrity of the sample population, instruments used in the study, the methodology, and the findings. In research, the reliability refers to the results obtained on the repeated administrations of tests, and the validity is the correlation between a test and the reference-standard tests (Karras, 1997). The Pearson correlation test uses an algorithm to measure the strength between relationships of variables and yields a quantitative analysis that measures the relationship between -1 and 1 . The closer to 1 indicates a positive correlation and the opposite holds true if the number is closer to -1 .

In this study, the internal validity was secured by using archived student achievement data that had been deemed reliable by the State Department of Education; and in addition, the archived data from the Instructional Culture Index/Insight Survey had also been deemed reliable and valid (Yuan & Schweig, 2016). The external validity of a study refers to the ability of a researcher to essentially use the data from the research obtained and generalize it amongst other similar populations or repeat the research in other settings. The archived data from the study site of the urban school district may not be representative of many other districts nationwide.

Expected Findings

Expected findings would indicate the strength between student achievement and instructional school culture in our most stable socio-economically urban school districts. A

positive correlation would be expected in student achievement and instructional school culture in an urban school district. In other words, the higher the instructional school culture score, the higher the school achievement scores. The research conducted in this study was anticipated to add to the limited research on student achievement and instructional school culture in urban learning communities. The study's findings were expected as insights for the most challenged learning environments, which would help build capacity in leaders on how to decrease the learning gaps that exist between the most privileged and the neediest populations.

Ethical Issues

Archived data used in this study included only summary data that was de-identified. Therefore, the researcher had access only to summary scores. The only ethical concerns involved the administration of the Instructional Climate Index and the administration of the FSA and NGSSS standardized assessments. The researcher is confident that the administration of these assessments was given accordingly and all guidelines were followed properly.

Summary

Covered in this chapter was the information pertaining to the instruments and methodology necessary to complete this study. Specifically, all the key components that were utilized in this study were discussed in detail. A Pearson correlation test was used to determine the strength between instructional school culture and student achievement in an urban school district. Ninety-seven schools were used from the 2015 to 2016 school year and from the 2016 to 2017 school year. Additionally, of these 97 schools being used, roughly 70% of the schools were classified as Title I schools. Archived quantitative data from the Florida Department of Education and TNTIP were employed by the researcher. Within the next chapter is the actual

data from the research and a detailed analysis of the archived data from three Title I elementary schools in an urban school district.

Chapter 4: Results and Analysis

The purpose of this correlational study was to analyze the correlation between school academic performance rating scores and the instructional school culture scores in elementary schools in an urban school district. The aim of this study was to ascertain if teachers' perceptions regarding school culture and climate, as reported on the Instructional Culture Index/Insight Survey in a an urban district, correlated to student achievement in elementary schools in third, fourth, and fifth grades and fifth grade science standardized tests. All the data used for this research study were archived data from the State Department of Education. Specifically, the Instructional Culture Index/Insight Survey that was produced by TNTP was available on the website of the school district being researched.

Included in this chapter are the research findings from the Pearson correlation test that were used to analyze the strength of the relationship between instructional school culture and student achievement in elementary schools within an urban school district. The statistical significance was analyzed using IBM SPSS Statistics 25. A scatter plot was the most useful graph for displaying the relationship between two variables (Mindrila & Balentyne, 2017) and was used to visually articulate the data.

Description of Sample

There was a total of 97 elementary schools used for the 2015 to 2016 school year and 95 elementary schools used in this research study for the 2016 to 2017 school year. Roughly 70% of the schools used in this research study were classified as Title I elementary schools. The majority of the students within the school district were African American. Within the Title I elementary schools, the majority of students lived near or below the poverty line. Table 1

contains a description of the data being studied. Table 2 contains the demographic data of the sample population being studied.

Table 1

Description of Sample

Years being researched	Number of elementary schools in study	Percentage of Title I elementary schools	Total number of Title I elementary schools
2015-2016	97	70%	68
2016-2017	95	74%	70

Table 2

Demographics of Sample

Years being researched	Number of students in elementary schools	Student ethnicity	Estimate of students taking standardized assessments
2015-2016 and 2016-2017	56,668	African American: 44% Caucasian: 35% Hispanic: 12% Multiracial: 5% Asian: 4% Native American/Pacific Islander: 0%	28,000

Summary of Results

A Pearson correlation test was conducted to determine the strength between instructional school culture and student achievement in elementary schools within an urban school district. The correlation was significant at the 0.01 level (2-tailed). Sig. (2-tailed) determines if there is a statistical significance amongst the variables. Statistical significance amongst two variables

exists when the sig (2-tailed) value is equal to or less than .05. That means there are increases or decreases in one coefficient or variable that relate significantly to increases or decreases in the other variable (Swank & Mullen, 2017).

In this study, data from 97 elementary schools for the 2015 to 2016 school year were used; and data from 95 elementary schools were used for the 2016 to 2017 school year. However, Karras (1997) concluded that a study with an abundance of subjects may yield a low Pearson correlation but was very significant based on the large number of subjects used in the research. An independent SPSS analysis was also used to detect any extreme outliers; the findings concluded that no extreme outliers existed in each data set in this body of research for the school years from 2015 to 2016 and 2016 to 2017.

Research Questions

This study addressed the correlational relationship between instructional school culture and student achievement. Two years of data were analyzed that included the Instructional Culture Index/Insight Survey and a composite of the scholastic scores of the students. To find answers as to the correlation, the study was designed to answer the following research questions.

- RQ1. What is the correlational relationship between instructional school culture as measured by the Instructional Culture Index Survey (ICI) and student achievement as measured by school performance composite scores for the academic school year 2015-2016 in an urban school district?
- RQ2. What is the correlational relationship between instructional school culture as measured by the Instructional Culture Index Survey (ICI) and student achievement as measured by school performance composite scores for the academic school year 2016-2017 in an urban school district?

Pearson Correlation Test Description

The Pearson correlation test (bivariate correlational analysis) was designed to test the strength and direction of the relationship between two continuous variables (Mindrila & Balentyne, 2017). Pearson's correlational test was used to determine if there was a statistical significance between the variable *instructional school culture*, as measured by the ICI, and student achievement, as measured by the variable *student achievement composite scores*. A scatterplot was graphed to visually represent the relationship between the two quantitative variables (Mindrila & Balentyne, 2017).

Given that all variables are continuous (interval/ratio data) and the hypotheses sought to assess the relationships between the variables, the Pearson r correlation instrument was the appropriate bivariate statistic for this research (Statistics Solutions, 2013). Correlation coefficients, r , vary from 0 (no relationship) to 1 (perfect linear relationship) or -1 (perfect negative linear relationship). Positive coefficients indicate a direct relationship, indicating that as one variable increases, the other variable increases. Negative correlation coefficients indicate an indirect relationship, indicating that as one variable increases, the other variable decreases (Mindrila & Balentyne, 2017).

Cohen's standard was used to evaluate the correlation coefficient, where 0.10 to 0.29 represents a weak association between the two variables, 0.30 to 0.49 represents a moderate association, and 0.50 or larger represents a strong association (Statistics Solutions, 2013). A scatterplot was used to display the data. A scatterplot visually articulates the association or relationship between two quantitative variables measured for the same individuals (Mindrila & Balentyne, 2017). The values of one variable appear on the horizontal axis, and the values of the

other variable appear on the vertical axis; each subject in the data appears as a point on the graph (Mindrila & Balentyne, 2017).

Pearson Correlation Analysis Terminologies

- Bivariate correlation data analysis (Pearson correlation) is used by researchers as a method to establish the validity evidence based on relationship between a test score and a conceptually related construct (Swank & Mullen, 2017).
- Positive correlation is a score from the Pearson correlation that is close to 1, that is, between 0 and 1 (Swank & Mullen, 2017).
- Negative correlation is a score from the Pearson correlation that is close to -1 , that is, between 0 and -1 (Swank & Mullen, 2017).
- Sig. (2-tailed) determines if there is a statistical significance amongst the variables. A researcher can conclude that statistical significance amongst two variables exists when the sig (2-tailed) value is equal to or less than .05., which means that increases or decreases in one coefficient or variable do relate significantly to increases or decreases in the other variable (Swank & Mullen, 2017).
- Cohen's standard is a method used to evaluate the correlation coefficient, where 0.10 to 0.29 represents a weak association between two variables; 0.30 to 0.49 represents a moderate association; and 0.50 or larger represents a strong association (Statistics Solution, 2013).
- Scatterplots visually articulate the association or relationship between two quantitative variables measured for the same individuals or subjects (Mindrila & Balentyne, 2017).

Detailed Analysis

School Year 2015 to 2016. A Pearson product-moment correlation coefficient was computed to assess the relationship between the instructional school culture and student achievement data for school year 2015 to 2016. There was a positive correlation between the two variables, $r = .47$, $n = 97$, $p = .00$ (see Table 3). Results indicated that school culture and student achievement for the school year 2015-2016 were moderately positively correlated. Therefore, the null hypothesis was rejected. The alternate hypothesis was accepted (H_1). There is a correlation between the two variables, although moderate (see the alternate hypothesis, Table 3, and the statistical analysis results in Figure 1).

H₁1: There is a relationship between instructional school culture as measured by the Instructional Culture Insight Survey (ICI) and student achievement as measured by school performance composite scores for the academic school years 2015-2016.

Table 3

Correlations (2015-2016)

		Achievement	Climate
Achievement	Pearson correlation	1	.474 ^a
	Sig. (2-tailed)		.000
	N	97	97
Climate	Pearson correlation	.474 ^a	1
	Sig. (2-tailed)	.000	
	N	97	97

^aCorrelation is significant at the 0.01 level (2-tailed).

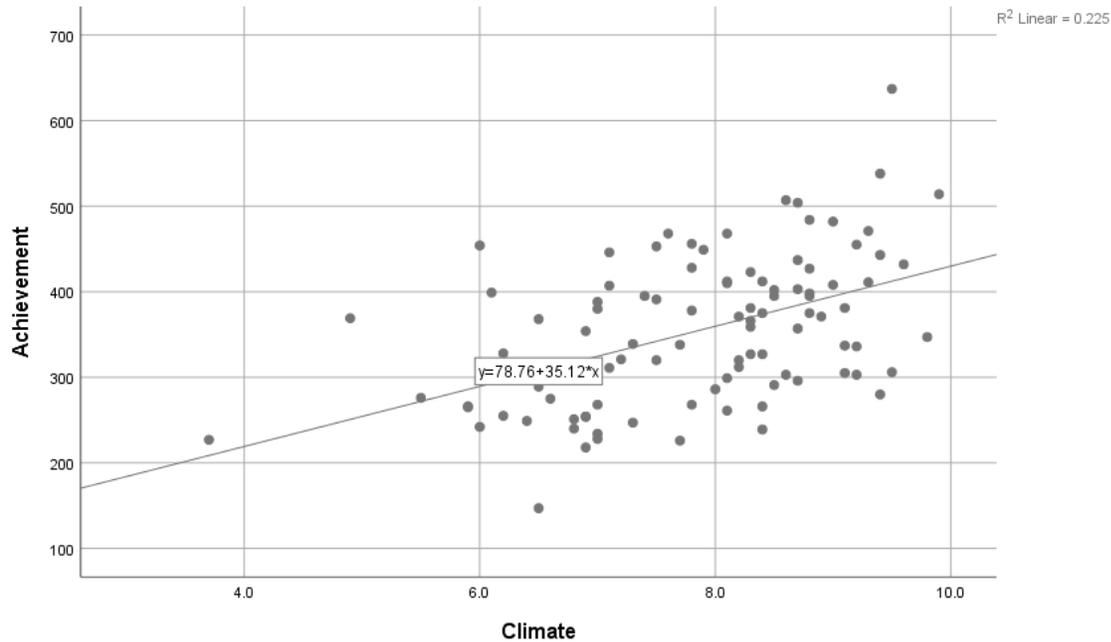


Figure 1. School years 2015-2016

School Year 2016 to 2017. A Pearson product-moment correlation coefficient was computed to assess the relationship between the instructional school culture and student achievement data for school year 2016 to 2017. There was a positive correlation between the two variables, $r = .27$, $n = 95$, $p = .00$. Results indicated that school culture and student achievement for the years 2016-2017 were slightly positively correlated. Therefore, the null hypothesis was rejected. The alternate hypothesis was accepted. There was a correlation between the two variables, although weak. Based on Cohen's standard, though weak, a statistically significant relationship exists between instructional school culture and student achievement for the 2016-2017 school year (see the alternate hypothesis (H₁₂), Table 4, and the statistical analysis results in Figure 1).

H₁₂: There is a relationship between instructional school culture as measured by the Instructional Culture Index/Insight Survey (ICI) and student achievement as

measured by school performance composite scores for the academic school year 2016 to 2017.

Table 4

Correlations (2016-2017)

		Achievement	Climate
Achievement	Pearson Correlation	1	.271 ^a
	Sig. (2-tailed)		.008
	N	95	95
Climate	Pearson Correlation	.271 ^a	1
	Sig. (2-tailed)	.008	
	N	95	95

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

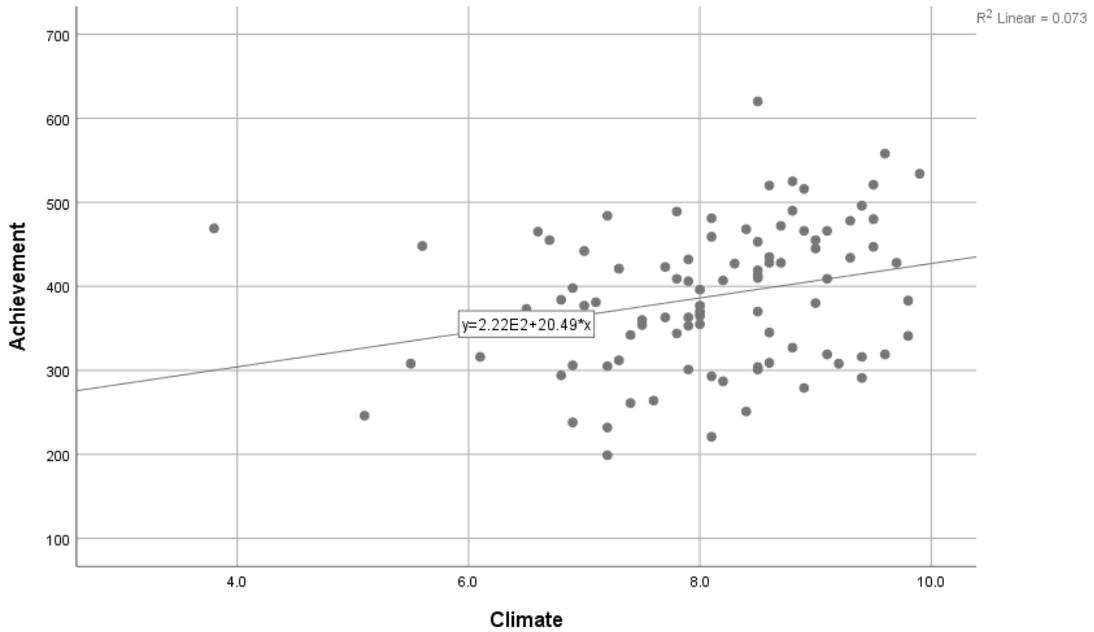


Figure 2. School years 2016-2017

Summary

The findings from the data analysis were presented in this chapter. A Pearson correlation test was conducted to determine the strength of the relationship between instructional school

culture and student achievement in elementary schools within an urban school district. In addition, scatterplots were used to visually display the linear relationship. The sample population used in this study was comprised of all the elementary schools within an urban school district. More than 70% of the elementary schools within this urban district were classified as Title I schools.

In this study, data from the 95 elementary schools were used for the school year 2016 to 2017 and data from 97 elementary schools for the school year 2015 to 2016. Based on these data, the null hypotheses were rejected for the two school years. There was a positive correlation between instructional school culture and student achievement for both years.

Chapter 5: Conclusions and Discussion

The purpose of this chapter was to examine the outcomes of the correlational analysis that sought to determine the correlation between school academic performance rating scores and instructional school culture scores as indicated by the results of the Instructional Culture Index/Insight Survey in elementary schools in an urban school district. An analysis of the findings for the alternative hypothesis and null hypothesis are included in Chapter 4. Implications and recommendations for future research and study are detailed in this chapter. The findings presented in this chapter add to the limited research on the relationship between instructional school culture and student achievement in the most socio-economically challenged learning communities.

Summary of Results

The results from the study indicated that the null hypotheses were rejected for both of the school years (H_01 and H_02). Though weak to moderate, a statistical significance existed between the variables being studied (H_11 and H_12). A Pearson correlation test was conducted to determine the strength between instructional school culture and student achievement in elementary schools within an urban school district. The correlation was significant at the 0.01 level (2-tailed). Sig. (2-tailed) determines if there is a statistical significance amongst the variables. Statistical significance amongst two variables exists when the sig (2-tailed) value is equal to or less than .05. That means that increases or decreases in one coefficient or variable do relate significantly to increases or decreases in the other variable (Swank & Mullen, 2017).

In this study, data from 97 elementary schools were used for the school year 2015 to 2016, and data from the 95 elementary schools were used for the 2016 to 2017 school year. School culture and student achievement for the school year 2015 to 2016 were moderately

positively correlated, $r = .47$, $n = 97$, $p = .00$. School culture and student achievement for the school year 2016 to 2017 were weakly positively correlated, $r = .27$, $n = 95$, $p = .00$. A moderate association between the variables existed for the 2015 to 2016 school year (Statistical Solutions, 2013). Based on Cohen's standard, though weak, a statistically significant relationship existed between instructional school culture and student achievement for the 2016 to 2017 school year.

An independent SPSS analysis was used to detect any extreme outliers and the findings concluded that no extreme outliers existed in each data set in this body of research (both 2015 to 2016 and 2016 to 2017 school years; Osborne & Overbay, 2004). It should be noted that a study with an abundance of subjects, as in this one, might yield a low Pearson correlation but still be significant based on the large number of subjects used in the research (Karras, 1997).

The scatterplots indicated outliers but they were not extreme outliers. In this study, the outliers were attributed to legitimate cases that were sampled. For example, when examining the data from School X, the school climate score was extremely low (6.0) and the school achievement high (454). During this period of time, there was an instructional leadership change in progress. Because the Instructional Culture Index/Insight Survey measures instructional culture, this naturally would have an effect on teachers' perceptions as to the lack of leadership for the school. The outlier was not truncated because the data point provides valuable information related to the importance of leadership (Osborne & Overbay, 2004).

Discussion of Results

The purpose of this correlational study was to statistically analyze the relationship between school culture, as measured by the Instructional Culture Index/Insight Survey, and student achievement as measured by school performance composite scores for the academic school years 2015 to 2016 and 2016 to 2017. A Pearson correlation test was conducted to

determine the strength of the relationship between instructional school culture and student achievement in elementary schools within an urban school district. In addition, scatterplots were used to visually display the data (Figures 1 and 2). The findings from the research indicated a weak to moderate relationship between instructional school culture and student achievement amongst the population studied. The researcher was able to give a basis for the need for more extensive research respectively in the area of school culture and instructional school culture in most challenging learning communities.

Discussion of the Results in Relation to the Literature

The literature available on instructional school culture and student achievement varies greatly. Many scholars hold different ideologies on the relationship between instructional school culture and student achievement (Adams et al., 2016; Gurr & Drysdale, 2016; Louis, 2015). There are some who would argue that the relationship between instructional school culture and student achievement is menial at best; and the pedagogical culture of the teacher alone determines school culture (Moller et al., 2013). Based on the results from the research, the factors that influence school culture include leadership or teacher and organizational structure (Adams et al., 2016; Gurr & Drysdale, 2016, Louis, 2015).

The lack of research pertaining to Title I schools, school culture, and student achievement has created a gap that needs to be filled with quality research involving our most challenged learning communities and environments (Brown, 2011). There is very limited literature on the relationship between instructional school culture and student achievement in socioeconomically challenged learning communities. The research findings suggested that a relationship, though weak, does exist and requires further investigation.

Professional development ultimately offers the opportunity for educators to advance or progress in whatever capacity that suits their personal, professional, or career goals (Lopez, 2015), and ultimately a great school culture is dependent upon the virtue of advancement being present within the learning community. Based on the research findings, the literature pertaining to the perceptions of school culture and teacher progression holds true. Many schools that received lower Instructional Culture Index/Insight Survey scores were rated low in teacher career progression. The literature on observation and feedback can also stand against scholarly scrutiny according to the data used and collected in this study.

According to Kane and colleagues (2014), teaching and learning do not improve in any capacity if strategic observation, feedback, and evaluation practices, based on accurate assessments, are not the norm in educational practices. According to the researchers, most teachers understand that accountability is needed; they just want to make sure the system is fair and unbiased. The study sought to prove that there was a connection between instructional school culture and student achievement. Based on the research findings, many schools that ranked high on the ICI had a robust system of accountability and fairness as it pertained to observation and feedback.

In this era of high-stakes academic accountability, teacher evaluation is a hot-button issue. On the Instructional Culture Index/Insight Survey (The New Teacher Project, 2016), evaluation and observation/feedback have separate domains; however, they are interlinked in the world of academia (Kane et al., 2014). According to Kane and colleagues (2014), teaching and learning do not improve in any capacity if strategic observation, feedback, and evaluation practices, based on accurate assessments, are not the norm in educational practices. According to the researchers, most teachers understand that accountability is needed; they just want to make

sure the system is fair and unbiased. In schools that have a great school culture, teachers (a) receive consistent feedback based on observations, (b) understand the evaluation system and components therein, and (c) feel that the evaluator and the evaluation system are fair and equitable for all (The New Teacher Project, 2016).

Literature on the school leaders' effect on school culture and student achievement suggested the work of the school leader ultimately dictates the output from the educators in their organization and uniquely affects the outcomes of the learning community as a whole (Gurr & Drysdale, 2016). The findings from this research suggested some support for the premise that a strong leader who was able to create a strong faculty perception and who is deemed favorable would increase student achievement outcomes, weakly at a minimum to moderately at the most.

Some literature suggested that student achievement is solely reflective of the ability of instructional leaders to sell the vision and create buy-in, increase capacity, and encourage knowledge sharing and build relationships with the educators within their school (Gurr et al., 2016). Findings from the research indicated that more research is needed on this phenomenon. However, the findings from this study supported all literature related to the major theories associated with school culture, which means one could argue that higher student achievement is based on all documented factors associated with school culture from career progression to leadership style to operations. Newman (2014) argued that leadership drastically affects the perceptions of school culture by both faculty and staff.

Research shows a positive learning environment is comprised of those who feel a strong sense of self-worth within the learning environment (Cushman & Cowan, 2010). The feeling of being valued as an asset in a learning environment helps promote a robust instructional school culture and climate. The research findings gave validity to the literature pertaining to the school

learning environment. Schools that had very high scores in the domain of learning environment typically had overall higher ICI scores. Based on the results from the data analysis conducted during this research process, there was a weak to moderate correlational relationship between instructional school culture and student achievement. Learning environment therefore plays a major role in student achievement.

Limitations and Delimitations

Given the fact there were only two school years of data, it may be cumbersome to generalize the findings and equate these results with other populations outside of the research sample. The research was limited to the notion that everyone who participated in the Instructional Culture Index represented their actual feelings on the survey. Lastly, the research was limited to only one data set pertaining to student achievement. Some schools had very low student achievement data and high Instructional Culture Index Survey scores. These data affected the outcomes of the Pearson correlation test and the scatterplot used to display the linear relationship of the data.

Another limitation was that the data were archived and the researcher had no control over the data input or analysis for accuracy. It is needed to understand the reasons for this limitation because of the outliers noted in the scatterplots of the data. Some outliers truly affect the data outcomes of research. For example, outliers are important to address because they affect the statistical analysis and increase the likelihood of Type 1 errors. There are several causes of outliers, such as human input errors and data variability. Outliers are data points three standard deviations from the mean (Osborne & Overbay, 2004). Some schools had high ICI scores, really low academic composite scores, and vice versa. These outliers were not deemed statistically extreme but were included in the study because they contained relevant information concerning

relationships to the variables; however, they did affect the data outcomes. For example, from the school year 2015 to 2016 to the school year 2016 to 2017, there were significant changes in leadership identified as outliers in the schools. The change in leadership offered an explanation for the high student achievement scores and low instructional school climate scores.

A delimitation in this study sample was the researcher's choice of one urban school district. Another delimitation was the researcher's choice to use only 2015 to 2016 and 2016 to 2017 school years in this study (Wargo, 2015). The delimitation extended to the population of students studied in this research project because the access gained by the researcher only included elementary school students.

Implications for Practice, Policy, and Theory

The findings indicated there was a positive, though weak to moderate, correlation between student achievement and school culture. These correlations should inspire school leaders to improve the school culture and climate within the learning communities and thus increase the potential student achievement outcomes (Gurr, 2015). If school leaders and state and national leaders commit to creating the best possible learning environments, student productivity should easily increase (Brown, 2011). Educational leaders should make it mandatory for all school districts that receive federal funds to acquire a tool that measures school culture, especially the most challenging school districts. To predict student outcomes, one can look into less complex methods of acquiring the status of a school's culture via surveys and less complex methods.

This study helps fundamentally to increase the necessary discourse on poverty and education by highlighting one of the major reasons for failure in socio-economically challenged areas—low student achievement (Lopez, 2015). The study made the connection between student

achievement gaps, student culture, and its impact on predominantly Title I learning communities. This study can spur further research aimed at eliminating the cycle of poverty that is prevalent in many communities locally and nationally. Education is the single best answer to eliminating poverty and creating more economic success in the United States and abroad (Ullucci & Howard, 2015). It is absolutely necessary to look at the driving forces that create low performing learning communities. School culture can positively impact learning communities and stakeholders, thus improving the quality of life for many directly and indirectly (Lopez, 2015).

The findings from this study indicated a relationship between instructional school culture and student achievement and is backed by other research (Gurr, 2015, Thapa et al., 2013). However, studies have not been conducted on Title 1 elementary schools. Three main theories exist on the concept: (a) School culture is determined by teachers and students who determine the outcome (Kleickmann et al., 2016); (b) effective organizational development increases school culture and increases student proficiency (Redding, 2014); and (c) an effective leader ultimately increases school culture and student achievement (Tatum, 2010).

Research shows that many students in socio-economically challenged learning environments or Title I schools, typically start school significantly behind their counterparts in more economically stable environments and this phenomenon continues well into adulthood (Hair et al., 2015). Naturally, this phenomenon creates a cycle that is extremely hard to break because the lack of education limits the lack of opportunities. The lack of opportunity contributes directly to the lack of resources and increases the probability of low-academic achievement of children who grew up in these economically challenged areas. Raising student scores in Title I schools is extremely important and demands a sense of urgency. Ensuring that all of our nation's populations have the opportunity to contribute meaningfully to society is what

makes up the core of our educational system. Title I elementary schools are constantly failing because they lack effective leadership, organizational structure, and a school culture that promotes professional development and knowledge sharing (Gurr, 2015). Moreover, this negative school culture creates an environment of non-achievement, discourages knowledge workers, and ultimately leads to failing learning communities. School culture is affected by teachers' perceptions of the leader and culture of the learning environment, which in turn affects student achievement (Newman, 2014). A benefit could be that one can look into less complex methods of acquiring the status of a school's culture to predict student outcomes via surveys and less complex methods.

Recommendations for Future Research

Based on the findings from this research, more studies should be conducted to examine the relationship between the perception of school culture and climate and student achievement in our most challenging schools. The research should include middle schools and high schools as well. Additionally, there is a need for studies on the perception of school culture and climate as it pertains to the students within a learning community and the relationship to student achievement. Moreover, this relationship should be examined and high performing schools and low performing schools that are not in socioeconomically challenged areas. The government should create a task force and commit resources to the study of the phenomenon that exists between instructional school culture and climate.

Conclusion

Research shows that many students in socio-economically challenged learning environments or Title I schools, typically start school significantly behind their counterparts in more economically stable environments and this phenomenon continues well into adulthood

(Hair et al., 2015). Naturally, this phenomenon creates a cycle that is extremely hard to break because the lack of education, limits the lack of opportunities that one can ascertain. The lack of opportunity contributes directly to the lack of resources and furthermore increases the probability of low-academic achievement of children that grew up in these economically challenged areas. Raising student scores in Title I schools is extremely important and demands a sense of urgency.

Ensuring that all of our nation's population have the opportunity to contribute meaningfully to society is what makes up the core of our education system. Title I elementary schools are constantly failing because they lack effective leadership, organizational structure and a school culture that promotes professional development and knowledge sharing (Gurr, 2015). Moreover, this negative school culture creates an environment of non-achievement, discourages knowledge workers, and ultimately leads to failing learning communities.

This research shows that there is a positive correlation in student achievement and the faculty's perception of school culture in the most challenging learning environments. We must now move to continue this research in middle and high schools as well. Researchers must also conduct studies to examine the perceptions of school culture by students and compare the relationships to student achievement. Our leaders locally and nationally should commit the resources necessary to study this phenomenon so that we can adequately decrease the achievement gap between those that are most vulnerable and those that have means.

References

- Adams, C. M., Ware, J. K., Miskell, R. C., & Forsyth, P. B. (2016). Self-regulatory climate: A positive attribute of public schools. *The Journal of Educational Research, 109*(2), 169–180.
- Andrews-Larson, C., Wilson, J., & Larbi-Cherif, A. (2017). Instructional improvement and teachers' collaborative conversations: The role of focus & facilitation. *The Teachers College Record, 119*(2), 1–37.
- Aydin, A., Sarier, Y., & Uysal, S. (2013). The effect of school principals' leadership styles on teachers' organizational commitment and job satisfaction. *Educational Sciences: Theory and Practice, 13*(2), 806–811.
- Bolman, L. G., & Deal, T. E. (2013). *Reframing organizations: Artistry, choice, and leadership*. Hoboken, NJ: John Wiley & Sons.
- Brown, A. E. (2016). *The effects of school climate on student achievement in lower and higher performing public and charter elementary schools in Tennessee*. (ERIC Document Research No. ED570053)
- Brown, K. D., & Goldstein, L. S. (2013). Preservice elementary teachers' understandings of competing notions of academic achievement coexisting in post-NCLB public schools. *Teachers College Record, 115*(1), 1–37.
- Brown, M. (2011). *Key strategies used by Title I Elementary school principals to increase student achievement in six San Bernardino County schools* (Doctoral dissertation, Concordia University, Portland Oregon).
- Curtis, E. A., Comiskey, C., & Dempsey, O. (2016). Importance and use of correlational research. *Nurse Researcher, 23*, 20–25. <http://dx.doi.org/10.7748/nr.2016.e1382>

- Cushman, P., & Cowan, J. (2010). Enhancing student self-worth in the primary school learning environment: Teachers' views and students' views. *Pastoral Care in Education, 28*(2), 81–95.
- Drucker, P. F. (1999). Knowledge-worker productivity: The biggest challenge. *California Management Review, 41*(2), 79–94.
- Florida Department of Education. (2018). *Just read Florida*. Retrieved from <http://www.fldoe.org/academics/standards/just-read-fl/>
- Gurr, D. (2015). A model of successful school leadership from the international successful school principalship project. *Societies, 5*(1), 136–150.
- Gurr, D., & Drysdale, L. (2016). Australia: The principal as leader—A review of Australian principal research, 2006–2013. In H. Ärlestig, C. Day, & O. Johansson (Eds.), *A decade of research on school principals: Cases from 24 countries* (pp. 187–209). Dordrecht: Springer.
- Hair, N. L., Hanson, J. L., Wolfe, B. L., & Pollak, S. D. (2015). Association of child poverty, brain development, and academic achievement. *JAMA Pediatrics, 169*(9), 822–829.
- Hau, Y. S., Kim, B., Lee, H., & Kim, Y. G. (2013). The effects of individual motivations and social capital on employees' tacit and explicit knowledge sharing intentions. *International Journal of Information Management, 33*(2), 356–366.
- Hauke, J., & Kossowski, T. (2011). Comparison of values of Pearson's and Spearman's correlation coefficients on the same sets of data. *Quaestiones Geographicae, 30*(2), 87–93.

- Heck, R. H., & Marcoulides, G. A. (1996). School culture and performance: Testing the invariance of an organizational model. *School Effectiveness and School Improvement*, 7(1), 76–96.
- Hislop, D. (2013). *Knowledge management in organizations: A critical introduction* (3rd ed.). Oxford, UK: Oxford University Press.
- Hoge, D. R., Smit, E. K., & Hanson, S. L. (1990). School experiences predicting changes in self-esteem of sixth- and seventh-grade students. *Journal of Educational Psychology*, 82(1), 117–127.
- Hoy, W. K. (1990). Organizational climate and culture: A conceptual analysis of the school workplace. *Journal of Educational and Psychological Consultation*, 1(2), 149–168.
- Huffman, J. B., Hipp, K. A., Pankake, A. M., & Moller, G. (2014). Professional learning communities: Leadership, purposeful decision making, and job-embedded staff development. *Journal of Symbolic Logic*, 11(5), 448–463.
- Kane, T. J., Kerr, K. A., & Pianta, R. C. (2014). *Designing teacher evaluation systems: New guidance from the Measures of Effective Teaching project*. San Francisco, CA: Jossey-Bass.
- Karras, D. J. (1997). Statistical methodology: II. Reliability and validity assessment in study design, Part B. *Academic Emergency Medicine*, 4(2), 144–147.
- Khalifa, M., Gooden, M., & Davis, J. (2016). Culturally responsive school leadership: A synthesis of the literature. *Review of Educational Research*, 86(4), 1–40.
<http://dx.doi.org/10.3102/>
- Kleickmann, T., Tröbst, S., Jonen, A., Vehmeyer, J., & Möller, K. (2016). The effects of expert scaffolding in elementary science professional development on teachers' beliefs and

- motivations, instructional practices, and student achievement. *Journal of Educational Psychology*, 108(1), 21–42. <http://dx.doi.org/10.1037/edu0000041>
- Kutsyruba, B., Klinger, D. A., & Hussain, A. (2015). Relationships among school climate, school safety, and student achievement and well-being: A review of the literature. *Review of Education*, 3, 103–135.
- Kythreotis, A., Pashiardis, P., & Kyriakides, L. (2010). The influence of school leadership styles and culture on students' achievement in Cyprus primary schools. *Journal of Educational Administration*, 48(2), 218–240. <http://dx.doi.org/10.1108/09578231011027860>
- Lopez, J. (2015). *Professional learning communities and school culture: A case of study in district-wide implementation of a PLC* (Doctoral dissertation, University of Texas, Rio Grande Valley).
- Louis, K. (2015). Linking leadership to learning: State, district and local effects. *Educational Leadership in Transition*. Retrieved from <https://www.tandfonline.com/doi/abs/10.3402/nstep.v1.30321>
- Machi, L. A., & McEvoy, B. T. (2012). *The literature review: Six steps to success*. Thousand Oaks, CA: Corwin Press.
- Macneil, A., Prater, D., & Busch, S. (2009). The effects of school culture and climate on student achievement. *International Journal of Leadership in Education*, 12(1), 73–84. Retrieved from <https://www.tandfonline.com/doi/abs/10.1080/13603120701576241>
- McCarty, A. T. (2010). *Child poverty in the United States: A tale of devastation and the promise of hope*. Retrieved from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5589198/>
- Mindrila, D., & Balentyne, P. (2017). *Scatterplots and correlation*. Retrieved from <http://dx.doi.org/10.1080/13603120701576241#abstract>

- Moller, S., Mickelson, R. A., Stearns, E., Banerjee, N., & Bottia, M. C. (2013). Collective pedagogical teacher culture and mathematics achievement: Differences by race, ethnicity, and socioeconomic status. *Sociology of Education*, 86(2), 174–194.
- Moon, M. (2009). *Knowledge worker productivity*. Retrieved from <https://dx.doi.org/10.1057/dam.2009.17>
- Mukaka, M. M. (2012). A guide to appropriate use of correlation coefficient in medical research. *Malawi Medical Journal*, 24(3), 69–71.
- Mulford B. (2014) Adaptivity as a transformative disposition of schools for student learning in the twenty-first century. In D. Hung, K. Lim, & S. S. Lee (Eds.), *Adaptivity as a transformative disposition* (Education Innovation Series). Singapore: Springer.
http://dx.doi.org/10.1007/978-981-4560-17-7_9
- Newman, S. (2014). *Teacher perceptions of leadership styles in distinguished Title I schools and the effect on teacher satisfaction and effort* (Doctoral dissertation, Concordia University, Portland, Oregon).
- Osborne, J. W., & Overbay, A. (2004). The power of outliers (and why researchers should always check for them). *Practical Assessment, Research & Evaluation*, 9(6), 1–12.
- Park, S., Stone, S. I., & Holloway, S. D. (2017, November). School-based parental involvement as a predictor of achievement and school learning environment: An elementary school-level analysis (Indonesian origin). *Children and Youth Services Review*, 82, 195–206.
- PhDStudent. (2018). *Diving deeper into limitations and delimitations*. Retrieved from <https://www.phdstudent.com/Choosing-a-Research-Design/diving-deeper-into-limitations-and-delimitations>

- Rigelman, N. M., & Ruben, B. (2012). Creating foundations for collaboration in schools: Utilizing professional learning communities to support teacher candidate learning and visions of teaching. *Teaching and Teacher Education, 28*(7), 979–989.
- Rowold, J., & Schlotz, W. (2009). Transformational and transactional leadership and followers' chronic stress. *Leadership Review, 9*(1), 35–48.
- Schmuck, R. A., Bell, S. E., & Bell, W. E. (2012). *The handbook of organization development in schools and colleges* (5th ed.). Santa Cruz, CA: Exchange Point International.
- Simon, N. S., & Johnson, S. M. (2015). Teacher turnover in high-poverty schools: What we know and can do. *Teachers College Record, 117*(3), 1–36.
- Snyder, T. D., De Brey, C., & Dillow, S. A. (2016). *Digest of Education Statistics 2014* (NCES 2016-006). Washington, DC: National Center for Education Statistics.
- Statistics Solutions. (2013). *Data analysis plan: Bivariate (Pearson) correlation* [WWW Document]. Retrieved from <http://www.statisticssolutions.com/academic-solutions/member-resources/member-profile/data-analysis-plan-templates/data-analysis-plan-bivariate-pearson-correlation/>
- Sun, J., Levey, J., & Vaux, N. (2015). An evolving data wise culture (DWC): A case study. *Journal of Interdisciplinary Studies in Education, 4*(1), 241–267. Retrieved from <http://itc-web.astate.edu/ojs>
- Swank, J. M., & Mullen, P. R. (2017). Evaluating evidence for conceptually related constructs using bivariate correlations. *Measurement and Evaluation in Counseling and Development, 50*(4), 270–274.
- Tatum, B. C. (2010). Accelerated education: Learning on the fast track. *Journal of Research in Innovative Teaching, 3*(1), 35–51.

- Thapa, A., Cohen, J., Guffey, S., & Higgins-D'Alessandro, A. (2013). A review of school climate research. *Review of Educational Research, 83*(3), 357–385.
- The New Teacher Project. (2016). *Duval County Public Schools Instructional Culture Insight Survey data*. Retrieved from <https://tools.tntp.org/confluence/display/INSIGHT/Insight+Resources+for+Principals>
- Teacher Talent Toolbox (TNTP). (2013). *TNTP's Instructional Culture Index*. Retrieved from https://tntp.org/assets/tools/Insight_Index_Upload.pdf
- Tuckman, B. W., & Harper, B. E. (2012). *Conducting educational research*. Lanham, MD: Rowman & Littlefield Publishers.
- Turriago-Hoyos, A., Thoene, U., & Arjoon, S. (2016). Knowledge workers and virtues in Peter Drucker's management theory. *SAGE Open, 6*(1), 1–9. Retrieved from <https://dx.doi.org/10.1177/2158244016639631>
- Ullucci, K., & Howard, T. (2015). Pathologizing the poor: Implications for preparing teachers to work in high-poverty schools. *Urban Education, 50*(2), 170–193.
- University of the West of England. (2018). *Data analysis: Pearson's correlation coefficient*. Retrieved from <http://learntech.uwe.ac.uk/da/Default.aspx?pageid=1442>
- Wargo, W. G. (2015). *Identifying assumptions and limitations for your dissertation*. Menifee, CA: Academic Information Center.
- Watson, T., & Bogotch, I. (2016). (Re)Imagining school as community: Lessons learned from teachers. *School Community Journal, 6*(1), 93–114. Retrieved from <http://www.adi.org/journal/CurrentIssue/CurrentIssue.pdf>
- Yin, R. K. (2003). *Case study research: Design and methods*. Thousand Oaks, CA: Sage.

Yuan, K., & Schweig, J. (2016). *An evaluation of the technical quality of the Instructional Culture Insight Survey*. Santa Monica, CA: Rand Corporation.

Appendix: Statement of Original Work

The Concordia University Doctorate of Education Program is a collaborative community of scholar-practitioners, who seek to transform society by pursuing ethically-informed, rigorously- researched, inquiry-based projects that benefit professional, institutional, and local educational contexts. Each member of the community affirms throughout their program of study, adherence to the principles and standards outlined in the Concordia University Academic Integrity Policy. This policy states the following:

Statement of academic integrity.

As a member of the Concordia University community, I will neither engage in fraudulent or unauthorized behaviors in the presentation and completion of my work, nor will I provide unauthorized assistance to others.

Explanations:

What does “fraudulent” mean?

“Fraudulent” work is any material submitted for evaluation that is falsely or improperly presented as one’s own. This includes, but is not limited to texts, graphics and other multi-media files appropriated from any source, including another individual, that are intentionally presented as all or part of a candidate’s final work without full and complete documentation.

What is “unauthorized” assistance?

“Unauthorized assistance” refers to any support candidates solicit in the completion of their work, that has not been either explicitly specified as appropriate by the instructor, or any assistance that is understood in the class context as inappropriate. This can include, but is not limited to:

- Use of unauthorized notes or another’s work during an online test
- Use of unauthorized notes or personal assistance in an online exam setting
- Inappropriate collaboration in preparation and/or completion of a project
- Unauthorized solicitation of professional resources for the completion of the work.

Statement of Original Work (continued)

I attest that:

1. I have read, understood, and complied with all aspects of the Concordia University–Portland Academic Integrity Policy during the development and writing of this dissertation.
2. Where information and/or materials from outside sources has been used in the production of this dissertation, all information and/or materials from outside sources has been properly referenced and all permissions required for use of the information and/or materials have been obtained, in accordance with research standards outlined in the Publication Manual of The American Psychological Association.

Wayman Franklin Graham

II

Digital Signature

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Name (Typed)

July 16, 2018

Date