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Through the Eyes of Teachers:
Relationships Between Principal Communication Style and School Climate

by
Ryan Lee Lang

A dissertation submitted to the faculty of Bethel University
in partial fulfillment of the requirements for the degree of
Doctor of Education

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2017

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Abstract

The purpose of this quantitative study was to see if a statistically significant relationship existed between principal communication style and school climate as perceived by elementary teachers in high achieving Title 1 elementary schools in a Midwest state. Teacher perceptions of principal communication style were assessed using the Communication Style Inventory (CSI). The six communication styles assessed were Expressiveness, Preciseness, Verbal Aggressiveness, Questioningness, Emotionality, and Impression Manipulativeness. Teacher perceptions of school climate were assessed using the Organization Climate Description Questionnaire – Revised Elementary (OCDQ-RE). School climate scores were calculated regarding a degree of principal openness and a degree of teacher openness perceived by the teacher. Statistically significant negative relationships were found between Verbal Aggressiveness and principal openness, Verbal Aggressiveness and teacher openness, and between Emotionality and teacher openness. Although difficult to generalize due to a small sample size, the findings are worthwhile to consider for practicing and aspiring principals as well as principal preparation programs.

Dedication

I wish to dedicate this dissertation to my loving and brilliant wife, Melissa.

Acknowledgements

Above all, I wish to thank Jesus Christ, my Heavenly father, for his grace, provision, and love in my life. Soli Deo Gloria!

To Melissa, my wife and best friend, thank you for your endless love, encouragement, and support. You urged me on even when I didn't think I could. You helped me set realistic goals and celebrate even the smallest accomplishments throughout this endeavor. Thank you!

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Chapter One: Introduction

Researchers and educators have long tried to determine the characteristics of effective schools (Deming, 1994; Mayfield & Garrison-Wade, 2015; Suber, 2011). Characteristics of effective schools have been identified through a meta-analysis of over 30 years of research to conclude that school-level factors impacting student achievement are: 1) guaranteed and viable curriculum, 2) challenging goals and effective feedback 3) parental and community involvement 4) safe and orderly environment and 5) collegiality and professionalism (Marzano, 2003). In addition, “Effective Schools Research suggests that successful student learning is linked to the following school characteristics: alignment of instruction and assessment, focused professional development, effective monitoring of instruction, reduction of teacher attrition, and positive school culture” (Suber, 2011, p. 2).

Barth et al. (1999) focused on 366 high-achieving, high-poverty schools across the nation and found that schools can positively impact student achievement when they implement research-based practices. These schools have shown impressive academic achievement even when most students come from challenging backgrounds. Effective schools exist and do have an impact on the students they serve.

The late W. Edwards Deming, American engineer and statistician, communicated the need for strong leadership in education when he wrote, “...Improvement of education, and the management of education, require application of the same principles that must be used for the improvement of any process,

manufacturing or service. Innovation and improvement of education requires leaders” (Deming, 1994, p. 6).

In a recent study in a middle school in a western state, Mayfield and Garrison-Wade (2015) sought to identify culturally responsive practices in a school that was successfully closing the achievement gap for black students. This supported a framework of school practices, which included: leadership, parent engagement, learning environment, pedagogy, student management, and shared beliefs. Mayfield and Garrison-Wade (2015) affirmed that necessity of effective leaders in the process of school reform and improving practice for all students.

Effective leaders are lifelong learners (Deming, 1994). This is true for leaders in government, business, or education. In fact, leaders in business and education have similarities as it relates to discovering ideas, creating knowledge, and sharing learning. Leaders in both fields focus on creating and keeping a focus on learning even during seasons of complex and rapid change (Fullan, 2001). In a world of such change, continuous improvement is imperative.

The field of education needs leaders who are committed to continuous improvement and learning (National Policy for Educational Administration, 2015). “Leading improvement is at the center of the principal’s leadership role as is sustaining learning” (Sergiovanni, 2009, p. 357). Leadership involves building the capacity of those whom one leads (Siguroardottir & Sigporsson, 2016).

Leaders create an environment in which professional learning and improvement is expected, valued, and supported (Dellar, 1999). The most effective leaders of change develop environments, which are conducive to learning and sharing

learning (Fullan, 2001). Hallinger and Heck (2010) found that collaborative leadership had positive effects on student achievement by supporting the capacity for continuous improvement. In addition, shared leadership and continuous improvement were seen as vital to one another (Hallinger & Heck, 2010).

Within a culture of change and continuous improvement, more than hard work and good intentions exist (Deming, 1994). There is a value for multiple perspectives (Cherian & Daniel, 2008). In addition, “common to every successful change initiative is that *relationships* improve” (Fullan, 2001, p. 5). Multiple perspectives and positive working relationships are vital to positive climate.

School Climate

Continual improvement in an ever-changing landscape raises the need for a climate that is supportive of these efforts. The climate must support collaboration and engagement of the entire school community (Cherian & Daniel, 2008). The climate must also support the overall social and emotional learning of students, as an enabling component, which supports academic learning (Zins, Bloodworth, Weissberg, & Walberg, 2004).

One avenue through which to assess school climate is to gain insights into the perceptions of the school’s stakeholders. Perceptions of students, teachers, principals, and community members are valuable indicators of the school climate - the overall sense of safety, relationships, teaching and learning, institutional environment, and school improvement (Thapa, Cohen, Guffey, & Higgins-D’Alessandro, 2013). These perceptions give school leaders necessary information about how to improve the quality of all aspects of a school’s climate.

Knowing this, educators and policy makers need to extend accountability, or revise the current accountability framework, to include measures of school climate in addition to academic accountability. Benefits of creating and sustaining a positive school climate include social and emotional safety (Birkett, Espelage, & Koenig, 2009; Brookmeyer, Fanti, & Henrich, 2006), positive youth development, mental health (Ruus et al., 2007), higher graduation rates (Goodenow & Grady, 1993), deeper school connectedness (Karcher, 2002; Wilson, 2004), and higher academic achievement (Thapa et al., 2013; Uline & Tschannen-Moran, 2008). Research reveals that students who experience positive school climate are more likely to learn (Cohen, Pickeral, & McCloskey, 2009). Schools that create positive learning climates help student develop holistically which predicts success in school as well as in life (Cohen, Pickeral et al., 2009; Zins et al., 2004).

Leader Communication

In this new era of increased educational accountability, the skills and knowledge of each principal matters more than ever (Hess & Kelly, 2007). Well-trained principals set a course (i.e., vision), develop people, and develop the organization (Steyn, 2008). The role of the principal is key to school improvement (Hess & Kelly, 2007, p. 2) and in creating and sustaining school climate (Weathers, 2011).

Research has revealed and described skills that effective principals utilize. Waters, Marzano, and McNulty (2004) conducted a meta-analysis, reviewing more than 5,000 studies, focused on the effects of principal leadership. They identified 66 principal practices embedded in 21 leadership responsibilities that affected student

achievement. One of the responsibilities impacting student achievement was communication with a correlation of 0.23. Clear communication is a necessary skill of effective principals.

In a 2007 study of randomly selected superintendents, Rammer (2007) found that superintendents considered those same 21 responsibilities of effective principals to be very important when hiring principals. Unfortunately, superintendents admitted they did not have systematic, intentional, or methodical means of assessing those responsibilities (Rammer, 2007). A connection between what is valued and what is assessed needs to be made.

When principals communicate effectively they can be leaders of change. Fullan (2001) described leaders as change agents if they improve in, what he describes as, the five components of leadership: moral purpose, understanding the change process, developing relationships, fostering knowledge building, and striving for coherence. “The greater the interdependence between components, the greater will be the need for communication and cooperation between them” (Deming, 1994, p. 96). A vital step in changing schools is by improving principals’ communication.

A system or organization is a network of interdependent components that work together to try to accomplish common goals (Deming, 1994). In the schoolhouse, it is the role of the principal to bring together the interdependent components to achieve the goals of the school. The principal plays a vital role.

In the past, the role of the principal has been viewed more as a manager (Kowalski, Petersen, & Fusarelli, 2007). Within that view as manager, communication is a necessary skill. However, with changes in political and

educational reform of recent years, the need for effective communication skills has increased (Ibrahim & Mahmoud, 2016; National Policy for Educational Administration, 2015). Communication is vital to effective leadership (Awamleh & Gardner, 1999; Den Hartog & Verburg, 1997; Frese, Beimeel, & Schoenborn, 2003; Kirkpatrick & Locke, 1996; National Policy for Educational Administration, 2015; Riggio, Riggio, Salinas, & Cole, 2003; Towler, 2003).

In a survey of 136 superintendents in a Midwest state, over 99% of them agreed or strongly agreed that communication was an important responsibility to consider when hiring a principal (Rammer, 2007, p. 72). In a discussion of the components of quality schools, Verdugo and Schneider (1999) revealed that open communication is one of the top five traits of effective schools based on available literature. Also, using survey methodology and emergent design, Harris (2006) investigated what award-winning principals considered best practices. Describing over 200 practices, the principals emphasized the importance of leaders to communicate and collaborate effectively (Harris, 2005). Clear, effective communication is necessary in creating and maintaining an effective school (Rafferty, 2003).

Problem

Recent research acknowledges that schools that invest time and effort into improving school climate can increase their school's overall efficacy and success (Black, 2010; Halawah, 2005; Kelley, Thornton, & Daugherty, 2005; Thapa, Cohen, Guffey, & Higgins-D'Alessandro, 2013). Although researchers have found, and continue to find, empirically grounded outcomes of a positive school climate, there is

a gap in the literature regarding empirically measured principal behaviors that relate to creating and sustaining positive school climate in today's schools (Rafferty, 2003). Few research studies have attempted to operationalize communication styles that leaders use as possible independent variables in school settings. Even fewer have investigated the relationship between these communication styles and outcome variables, such as increased school climate (De Vries et al., 2010). Empirical research in the area of communication as a possible influence on school climate is needed.

Often, school climate is viewed as an independent variable - that which does not depend on another variable. However, school climate can also be viewed as the dependent variable – that which depends on something else. School climate can and does change. “Little is known about the antecedents of such change” (Hoy, 1990, p. 164).

In a recent dissertation study, general principal communication and school climate was explored (Oswalt, 2011). Principals and teachers responded to the Organizational Climate Description Questionnaire - Revised Elementary (OCDQ-RE) as a measure of school climate and to one-on-one interviews regarding general characteristics of principal communication. Findings revealed a relationship between face-to-face communication, positive reinforcement, and positive school climate (Oswalt, 2011). What have yet to be found in literature are empirical studies investigating to what extent relationships exist, if any, between a principal's communication style and school climate.

In a small study in northern Sweden, “The teachers and principals had a difficult time identifying how to improve the school’s internal communication, but were in agreement that changes needed to be made” (Arlestig, 2007, p. 272). The relationship of principal communication behaviors and school climate has not yet been thoroughly investigated. Arlestig stated that, “The relationship between school leaders and different aspects of the communication process need to be explored further” (p. 272).

Acknowledging the importance of communication to effective leadership practice is just the beginning.

Mentioning communication and even stating its importance to effective practice, however, has not produced behavioral changes. To understand why it is challenging to prepare administrators to be effective communicators, we must define communication competence in the context of the school administration profession and then establish criteria for acquiring and measuring competence. (Kowalski et al., 2007, p. 90)

Once communicative competence is understood in the setting of the school, it may be found to be the bridge between theory and more successful social interactions (Wiemann & Backlund, 1980).

Statement of Purpose

The purpose of this study is to examine what relationship, if any, exists between teachers’ perception of their principal’s communication style and teachers’ perception of school climate. This study situates itself as a bridge between principal communication behaviors and school climate. Enhancing school climate is a strategy

towards improving the effectiveness of the school. The findings of this study may contribute to a clearer understanding of communication competence for elementary school principals, principal preparation programs, and other school improvement stakeholders.

Research Questions

Communication style can be comprised of six domain-level scales. These domains include Expressiveness, Preciseness, Verbal Aggressiveness, Questioningness, Emotionality, and Impression Manipulativeness as identified by De Vries et al. (2013). During the course of this study, the following research questions will guide the investigation:

RQ 1. What relationship, if any, exists between Expressiveness and school climate?

RQ 2. What relationship, if any, exists between Preciseness and school climate?

RQ 3. What relationship, if any, exists between Verbal Aggressiveness and school climate?

RQ 4. What relationship, if any, exists between Questioningness and school climate?

RQ 5. What relationship, if any, exists between Emotionality and school climate?

RQ 6. What relationship, if any, exists between Impression Manipulativeness and school climate?

Significance

Benefits of this study are threefold. First, the results of this study may provide practicing, as well as aspiring, principals with insight into the vast area of communication within schools. Literature indicates that principals need to be effective communicators; however, to influence practice, more than a list of ideal communication behaviors is needed (Arlestig, 2007). Principals need to know what communication behaviors teachers see as most valuable because teachers are the primary recipients of principals' communications. Results of this study may contribute to a more robust understanding of communication competence in the role of the principal.

Second, results of this study may inform principal preparation programs - an area which principals have identified as needing improvement. Principals agree they need to be more effectively prepared overall (Hess & Kelly, 2007). In a study investigating the needs of beginning principals, Duncan, Range, and Scherz (2011) surveyed over 100 principals in a Midwest state and reported, "Principals indicated that early in their career, they needed most support in working with difficult staff members" (p. 12). Working amid conflict is the crucible for the most effective communication strategies, and principals need more support in this area. With a more clearly defined understanding of communication competence of the principalship, institutions of higher education will more accurately prepare principals for the work that lies ahead.

Third, results of this study may provide insight into next steps in terms of research. Currently, no known studies have sought to investigate principal

communication style as an independent variable with school climate as the dependent variable in high achieving elementary schools. The findings of this study may guide future research in specific aspects of communication and school climate that need additional investigation.

The implementation of the narrow, academic-focused accountability measures of No Child Left Behind (NCLB) has impeded on the need to develop school principals holistically. Principals indicated that their districts provided the most professional development in using data and instructional leadership. However, they reported that professional development efforts in all other categories were low or very low (Duncan et al., 2011). Current professional development practices hold principals to a high standard in regard to their instructional leadership perhaps to the detriment of other aspects of their effectiveness as leaders. Similar to viewing learners holistically (Cohen, 2006), a holistic view of the principalship can be taken as well.

Discrepancies have been documented regarding the needs that principals identify in their positions and the professional development they receive. The largest discrepancies, "...between professional development needs and district professional development provision occur in the areas of communication, relationship building, and conflict resolution, that is, the categories of working with staff, parent, and student issues, and creating a collegial faculty" (Duncan et al., 2011, p. 14). It is clear that this gap needs to be addressed and with more empirical data in this area, policy makers may begin to support efforts to address it. Findings of this study may provide

value in helping principals, researchers, and institutions of higher education unpack the essential role of the principal as lead communicator within the school.

Delimitations and Limitations

The sample of this study has limitations. This study is limited to high achieving, Title 1 schools so findings may not be generalized to low-achieving schools or schools with little poverty. This study was also conducted in a Midwest state, and thus, findings may not be generalizable to states other than Minnesota.

Organization of this Study

This study is comprised of five chapters. Chapter One includes a general introduction, background, and a statement of the problem as well as necessary rationale and significance of this study. A review of literature is presented in Chapter Two, which explores the topics of leadership, communication, and school climate. Chapter Three defines the research methodology employed in this study, including the research design, setting, participants, instrumentation, and data analysis procedures used. Chapter Four includes the findings of the study. Finally, a discussion of the findings, conclusions, and implications are shared in Chapter Five.

Chapter Two: Review of Literature

Leadership Theories

For more than a century, researchers have sought to provide theoretical background to the area of leadership. In 1840, Thomas Carlyle wrote *On Heroes and Hero Worship and the Heroic in History*, which gave popularity to the Great Man Theory. The Great Man Theory proposed that leaders were simply born, were only male, and their effective leadership traits were intrinsic (Carlyle, 1840).

From the work of Carlyle, another theory emerged - Trait Theory. This theory, popular in the 1930s, suggests that people are either born with, or made with, certain qualities that allow them to become excellent leaders (Colbert, Judge, Choi, & Wang, 2012). Interest in the area of leadership research continued.

Starting in the 1940s, as a response to previous theories focusing on innate characteristics of leaders, came leadership theories focusing on specific behaviors of leaders - behavioral theories. One of these behavioral theories was the Managerial Grid Model that has concern for people and concern for production (Blake & Mouton, 1967). Managerial Grid Model and other behavioral theories have remained of interest in the field of leadership and have evolved over recent years.

During the 1960s, contingency theories began to surface and continued to do so for the next few decades. Contingency theories moved beyond simply identifying innate abilities in leaders (i.e., Great Man Theory and Trait Theory) or specifying static leader behaviors (Behavioral Theory). Instead, contingency theories recognized that there is no single way to lead and that leadership style should be based on the situation. Emphasis was on rational thinking. One example of contingency theory

included the Vroom-Yetton-Jago Decision Theory (Vroom & Jago, 1978). This theory highlighted that the leader assessed the situation and then determined the degree to which the group should be involved in the decision-making process.

In the 1970s a transactional leadership theory emerged called Leader-Member Exchange Theory (Gerstner & Day, 1997). The theory points to the interaction of leaders and followers. Leader-Member Exchange focused on the use of rewards and punishments as a means to increase pleasurable experiences and minimize negative experiences.

At about the same time, Transformational Leadership Theory, which focused on more than rational thinking (including emotions and values), began to take the stage in the area of leadership research. Transformational leadership found its grounding in leaders and followers working together to transform and improve levels of moral leadership and motivation. “Transformational leaders seek to transform the meaning structures of followers” (Marion & Gonzales, 2014, p. 157).

Regarded by some as the beginnings of a separate theory, while also agreeing it contained overlapping characteristics with transformational leadership theory, was the work of Max Weber throughout the early-to-mid 1900s. Others furthered Weber’s work and soon after the theory of Charismatic Leadership emerged, which highlighted the charm and personality of a leader to gather followers (Conger & Kanungo, 1987; Fuller, Patterson, Hester, & Stringer, 1996; Shamir, House, & Arthur, 1993;).

With such emerging theories, it is important to note that understanding of each theory developed over time as well. In an evaluation of conceptual weaknesses of

some leadership theories, Yukl (1999) described ambiguity in transformational leadership because of its primary focus on dyadic interactions and not enough focus on group-level or organizational-level influence. Leadership theories will continue to evolve as educational leaders seek to impact student learning in our ever-changing world (Stewart, 2006).

The theoretical position used as the basis for this study is transformational leadership theory. Although a variety of definitions exist, most perspectives of transformational leadership include the ability of a leader to increase commitment, capacity, and engagement of followers in meeting organizational goals (Leithwood & Jantzi, 2006; Marks & Printy, 2003). Bass (1990) suggested that a transformational leader is a developer of individuals and a builder of teams. Transformational leaders desire to see change, or transformation, across the entire organization (Deming, 1994).

Transformational leaders possess knowledge, personality, and persuasive power; they are lifelong learners, empower individuals to work together in collaboration, create trust, and listen (Deming, 1994). In a quantitative study of six principals and 55 teachers in a small school district in Texas, results showed a positive relationship between transformational leadership and school climate (Allen, Grigsby, & Peters, 2015).

Leadership is multifaceted and mankind's understanding of leadership has evolved for more than a century. This long history of emerging leadership theories continues to reveal the complexity of leadership and our growing understanding of it (Cicero, Pierro & Van Knippenberg, 2010; Dewan & Myatt, 2008). Educational

leaders today must continue to reflect upon their practice and measure its impact on student learning.

Leadership and Communication

Interest in the role of communication within leadership is not new. Several researchers have investigated general leader communication (Downs and Down, 1989; Richmond & McCroskey, 1979) as well as relational or interpersonal communication (Burgoon & Hale, 1984). From this foundational work investigating communication's role in leadership, others have more recently concluded that effective communication is an essential component to the study of leadership (Awamleh & Gardner, 1999; Den Hartog & Verburg, 1997; Frese et al., 2003; Johansson, Miller, & Hamrin, 2014; Kirkpatrick & Locke, 1996; Luo et al., 2016; Mayfield & Mayfield, 2007; Penley & Hawkins, 1985; Riggio & Reichard, 2008; Riggio et al., 2003; Towler, 2003).

Leader communication, specific to the field of education, is no different. Effective communication is “the linchpin that connects all areas [change, decision making, and conflict management within a school] and provides the lifeblood that generates substance, allowing them to function” (Green, 2013, p. xiv). Principals' communication behaviors can be predictive of school climate and together these predict the overall effectiveness of school improvement efforts (Bulach, Boothe, & Pickett, 2006).

Understanding Communication

The Shannon-Weaver model of communication helps to describe the basic process of communication (Shannon, 1948). The process begins with a message that

originates from one who has information or a thought (i.e., sender or source). The message is transmitted out as a signal and may face obstacles or “noise” on its pathway through a communication channel, which is the medium used to transmit the signal to the receiver. The receiver performs the inverse operation of the transmitter and the message reaches the final destination (Shannon, 1948).

Considering how communication is distributed is of importance.

Communication channels can be formal or informal (Johnson, Donohue, Atkin, & Johnson, 1994) and be defined as we “the formal or informal processes by which the message gets from the sender to the receiver” (Wood, 1999, p. 136). Examples of communication channels might include face-to-face methods, written methods, or mass communication (e.g., meetings) methods (Wood, 1999).

Within any organization, team, or group communication problems occur. The most common communication problems include: strict adherence to the chain of command, poor listening skills, poor language skills, lack of credibility, information overload, and excessive use of informal channels (Kowalski et al., 2007). Effective communication requires both school leaders and subordinates to overcome these communication barriers. However, “successful communication seems to lie primarily with school administrators because they are the ones to develop a two-way communicative climate” (Lunenburg & Ornstein, 2012, p. 176).

Competence in communication is of great interest to communication researchers of both nonverbal and verbal communication (Johansson, Miller, & Hamrin, 2014; Riggio, 1986; Wiemann & Backlund, 1980). “Communicative competence focuses on the individual's ability and skill, which necessarily includes

both knowledge of social/communicative rules and the wherewithal to perform in an appropriate manner” (Wiemann & Backlund, 1980, p. 188). By looking more closely at communication competence within the school, educational leaders may bridge the gap between communication theory and practice.

A communicative leader engages employees in dialogue, shares and seeks feedback, practices participative decision making, and is perceived as open and involved (Johansson, Miller, & Hamrin, 2014). On the contrary, a task-oriented leadership depends less on open and receptive communication styles and is directive and controlling (De Vries et al., 2010).

Measuring Communication

Even with a shared interest in the broad topic of communication, much variability exists in literature regarding how communication is measured. Instruments have been developed for use within a variety of communication contexts. Some contexts include doctor-patient communication (Buller & Buller, 1987), partner communication (Noller & White, 1990), parent-child communication (Ritchie & Fitzpatrick, 1990), and sales communication (Notarantonio & Cohen, 1990). Several more instruments exist in the literature as well. No matter which measure is used, it is important to retain the posture that it is the perception of the receiver - not the perception of the sender - which is the most accurate indication of the level of effectiveness of the communication (Hogan, 2005; Hogan, Curphy, & Hogan, 1994). The existence of such an array of instruments for both specific and general contexts further underscores the importance of communication.

De Vries, Bakker-Pieper, Siberg, Van Gameren, and Vlug (2009) conducted a groundbreaking lexical study and built upon Norton's (1983) definition of communication style to include:

The characteristic way a person sends verbal, paraverbal, and nonverbal signals in social interactions denoting (a) who he or she is or wants to (appear to) be, (b) how he or she tends to relate to people with whom he or she interacts, and (c) in what way his or her messages should usually be interpreted. (De Vries et al., 2009, p. 179)

This definition is more appropriate because it adds elements of identity and interactional aspects of communication behaviors (De Vries et al., 2010).

This study also operationalized the important dimensions of one's communication style. After hundreds of adjectives and adverbs were selected on the basis of their ability to describe communication style, over 400 respondents shared self-ratings and De Vries et al. (2009) provided preliminary evidence for seven dimensions that made up one's communication style. This instrument was named the Communication Styles Inventory (CSI). After continued use of this newly formed tool, which sought to measure the original seven dimensions, De Vries, Bakker-Pieper, Konings, Schouten (2013) revised the CSI to measure six dimensions of one's communication style. Those six domain-level scales are Expressiveness, Preciseness, Verbal Aggressiveness, Questioningness, Emotionality, and Impression Manipulativeness.

The CSI consists of 96 items that are divided equally among 24 facets. Four facets make up each dimension. The six dimensions comprise one's communication

style (with 16 items per dimension) and are displayed in Appendix F. All items are answered on a Likert-type scale with responses ranging from 1 (completely disagree) to 5 (completely agree). Cronbach reliabilities of the six dimensions ranged from .82 to .88 in a community sample and from .83 to .87 in a student sample (De Vries et al., 2013). The CSI domains and corresponding facets are listed in Table 1.

Table 1

Dimensions and Facets of the Communication Style Inventory (CSI)

Six Dimensions	24 Facets
1. Expressiveness	Talkativeness
	Conversational Dominance
	Humor
	Informality
2. Preciseness	Structuredness
	Thoughtfulness
	Substantiveness
	Conciseness
3. Verbal Aggressiveness	Angriness
	Authoritarianism
	Derogatoriness
	Nonsupportiveness

4. Questioningness	Unconventionality
	Philosophicalness
	Inquisitiveness
	Argumentativeness
5. Emotionality	Sentimentality
	Worrisomeness
	Tension
	Defensiveness
6. Impression Manipulativeness	Ingratiation
	Charm
	Inscrutableness
	Concealingness

The first dimension is Expressiveness. Expressiveness refers to patterns of behavior in which one tends to talk and guide conversations and to include humor in natural ways, which aid in informal communication (Bakker-Pieper & De Vries, 2013). It includes a mix of talkativeness, certainty, energy, and eloquence (De Vries et al., 2009). Bakker-Pieper and De Vries (2013) further stated, “A highly expressive leader is easily approachable and will be much easier to interact with than with one who shows low expressiveness” (p. 12), which is aligned with other social expressiveness research (Riggio, 1986; Riggio et al., 2003). Expressiveness is an

important component of effective communication for leaders (Bakker-Pieper & De Vries, 2013).

The second communication style dimension is Preciseness. Preciseness “refers to a tendency to communicate in an organized, well-structured, and well-worded way” (Bakker-Pieper & De Vries, 2013, p. 13). Preciseness consists of clarity, conciseness, efficiency, and composure in communication (De Vries et al., 2009). Suggested to be the most important predictor of leadership performance (De Vries et al., 2010), Preciseness relates most closely to how a leader leads (Bakker-Pieper & De Vries, 2013). Preciseness is important because ambiguity and lack of clarity are negatively related to organizational outcomes (Cicero et al., 2010).

A third dimension of communication style is a combination of three original dimensions of the CSI based on lexical factors: Threateningness, Niceness, and Supportiveness. After several rounds using the original dimensions, those three dimensions were found to usually load on a single factor (De Vries et al., 2013). Out of this finding was the creation of a new single factor: Verbal Aggressiveness. The Verbal Aggressiveness dimension can be characterized by these characteristics: friendliness, cheerfulness, accommodation, admiration, abuse, and threateningness (De Vries et al., 2009).

A fourth dimension, one that is more challenging to measure, is Questioningness (which was originally called Reflectiveness by De Vries et al., 2009). Questioningness “consists mainly of the components engagement, analytical reflectiveness, and philosophical or poetic communication behaviors” (De Vries et al., 2009, p. 195). This dimension involves behaving in unconventional ways (e.g.,

talking about unexpected things) or being argumentative (e.g., provoking others' thinking by making bold statements).

Emotionality is the fifth dimension of communication style as identified by De Vries et al. (2009). This dimension reflects nouns and adjectives such as: sadness, anger, tension, and irritability. Interestingly, its highest loading terms are all adjectives (De Vries et al., 2009). This dimension aligns with the work of Ilies, Curseu, Dimotakis, and Spitzmuller (2013) whose results supported the prediction that followers' extra effort and leader's perceived effectiveness was positively associated with the leader's emotional expressiveness. The importance of emotional expressiveness in leadership is growing in popularity in recent years both abroad (Rajah, Song, & Arvey, 2011) as well as in the United States (Gooty, Connelly, Griffith, & Gupta, 2010).

The sixth communication style dimension is Impression Manipulativeness. Although not a dimension within the original Communication Styles Inventory, De Vries et al. (2013) added this dimension to reflect aspects of deception communication including ingratiation, deceit, and charm. This aligns with other deception detection research that focuses on motives and context of detection instead of solely on nonverbal cues (Levin, Shaw, & Shulman, 2010).

Regarding the construct validity of the CSI, several other lexical marker scales were used to investigate convergent and discriminant correlations. Overall, medium to strong convergent correlations ($\geq .40$) were observed. "The results of this study seem to offer support for the Communication Style Inventory (CSI) both psychometrically and in terms of its alignment with the lexical communication

dimensions, other communication style instruments, and its association with personality” (De Vries et al., 2013, p. 519).

The study of communication styles may contribute to communication theory research in a few ways. First, the use of a framework such as found in the CSI may provide focus to the sender about communicative behaviors. This supports the work of the Communication Competence model (Spitzberg, 2000), which includes knowledge of the appropriate behavior for a given situation, skill to execute the specific behavior, and motivation to communicate in a competent manner.

Another way to use the dimensions of the Communication Styles Inventory is to look at combinations of styles in the prediction of important outcomes (De Vries et al., 2013, p. 523). Minimal research has attempted to look at this connection as well as explore what other connections may exist across a variety of leadership contexts. The CSI may be a useful tool in further exploring the relationship between communication styles and leadership outcomes.

Lastly, the six dimensions of the CSI provide the framework to further explore interpersonal communication, which may help form new hypotheses or communication theory. More research in the area of communication style is needed; however, the Communication Styles Inventory provides theoretical, empirical, and practical advantages in fields where communication is a necessary behavior (De Vries et al., 2013).

Effective Principal Communication

In years past, effective communication has been viewed as important for school leaders. However, there was no substantial coursework in preparation

programs nor was there licensing criteria related to effective communication for the principalship (Kowalski et al., 2007). School restructuring strategies of the early 1990s heightened the need for schools to be flexible enough to adapt to students' and schools' shifting needs. Over time, America has changed into the information-based society of today. Principals' skill in effective communication during continual seasons of change has been put to the test.

In 2015, educational leaders from across the United States reassessed the landscape of education and viewed educational leadership through the most current research. In doing so, it was realized that professional standards for principals needed to be revisited as well. The Interstate School Leaders Licensure Consortium (ISLLC) standards (Council of Chief State School Officers, 2008) were replaced with the Professional Standards for Educational Leaders 2015 (National Policy for Educational Administration, 2015). These newly created standards were grounded in research and served as guiding principles in effective, student-centered leadership.

The 2015 Standards adopt a future-oriented perspective. While they are grounded in the present, they are aspirational, recognizing that the changing world in which educational leaders work today will continue to transform—and the demands and expectations for educational leaders along with it. The 2015 Standards envision those future challenges and opportunities so educational leaders can succeed in the future. (National Policy for Educational Administration, 2015, p. 3)

Additionally, the Standards are grounded in human relationships in both leadership and in the work of teaching and learning (National Policy for Educational

Administration, 2015). Being able to lead as a change agent requires clarity in communication during changing times. It requires school administrators to engage in continuous communication practices (Kowalski et al., 2007).

After interviewing 36 teachers and two principals in a study devoted to investigating the role of principals' communication as a contribution to school improvement, Arlestig (2007) stated, "Communication is as vital in organizational processes as learning" (p. 272). Effective communication is essential and it contributes to several positive outcomes.

Outcomes of effective communication have been outlined in recent studies. One outcome is that teachers valued open communication with their principals which allowed them to communicate their ideas, concerns, and opinions freely (Brown, Finch, MacGregor, & Watson, 2012). In this way, effective communication between principal and teachers promoted more effective overall communication within the school.

Another outcome of effective principal communication is teachers' increased sense of community. In a study including over 900 urban elementary schools, Weathers (2011) stated, "Teachers' perception of principal leadership has the strongest of any policy amenable effect on teachers' sense of community" (p. 27). Teachers' sense of community was informed by whether the principal communicated expectations, was supportive, enforced discipline, was kind, recognized staff for their work, and discussed instructional practices (Weathers, 2011).

Effective communication contributes to positive outcomes while ineffective communication contributes to negative outcomes. Ineffective communication allows

for divergent voices to grow, based in fear and frustration with change (Brown et al., 2012). It was found that those angry voices were mostly in the large schools and those *without* active professional learning communities or small learning communities (Brown et al., 2012). This points to the fundamental need for effective communication within the school.

Effective communication is vital to the role of the principal. Overseeing the day-to-day operations of a school requires a principal to communicate with a variety of stakeholders. While the current focus of literature is instructional leadership, to be successful as a principal, one must have a strong foundation in interpersonal skills (Duncan, Range, & Scherz, 2011). It is important to remember that, “Effective communication is at the heart of creating and maintaining the effective school” (Rafferty, 2003, p. 66). The field of education must be concerned about how to best develop and support principals as communicators. It is essential for many aspects of the principalship.

Principals’ communication has an influence on the outcomes of the school. Communication within the school helps shape the social reality of teachers (Rafferty, 2003). Another outcome is that teachers’ perceptions about their schools heavily influence their attitudes, which impact their behaviors (Rafferty, 2003). Thus, school excellence and improvement efforts are directly connected to what teachers perceive and how they act (Rafferty, 2003).

In recent years, more schools, districts, and states are using school climate data to help define school success (Cohen, Pickeral et al., 2009). However, much more still needs to be done. School climate data, which includes academic and

nonacademic information, provides leaders with information that can direct school improvement efforts (Cohen, Pickeral et al., 2009). It affirms that efforts to improve school climate, safety, and learning are not separate endeavors (Cowan, Vaillancourt, Rossen & Pollitt, 2013). Leaders of today need to value the role that climate data has in school improvement.

Culture or Climate

Researchers argue that, “leaders must attend to the heart and soul of an organization as positive interpersonal relationships between employees are central to organizational success” (Weathers, 2011, p. 28). The heart and soul of an organization is often referred to as the organization’s *climate* or *culture*. It can also be described as the “feel” of the workplace (Hoy, 1990). Organizational climate and organizational culture are quite similar. Climate and culture suggest a natural, humanness to the organization and allow one to view the organization holistically (Hoy, 1990).

During the early 1990s, contemporary discussions regarding school effectiveness used the terms *school climate* and *school culture* interchangeably, but did so without providing an adequate definition of either term to understand their differences (Hoy, 1990). This is problematic, as differences between the terms do exist.

Based on Hoy’s (1990) work, it seems clear that a distinction between the terms is needed. *Organizational climate* is often based in the fields of psychology and social psychology using survey research and multivariate statistics. *Organizational culture* is often based in the fields of anthropology and sociology

using ethnographic techniques and linguistic analyses. There is tension between research on organizational culture and research on organizational climate because of these key differences (Hoy, 1990).

School culture can be described in a variety of ways, such as a culture of trust (Tarter & Hoy, 2004), the values and traditions (Sahin, 2011), or the values, norms, and relational trust within a school (Rhodes, Stevens, & Hemmings, 2011). Perhaps the most comprehensive definition of school culture is, “a complex pattern of norms, attitudes, beliefs, behaviors, values, ceremonies, traditions, and myths that are deeply ingrained in the very core of the organization” (Barth, 2002, p. 7) and which is formed over the course of history (Deal & Peterson, 1990).

Popularity of organizational culture as a construct in studies of school effectiveness comes primarily from similar work in corporate cultures (Hoy, 1990). However, the term *school culture* is not always best for educators due to the many social psychological concepts often being investigated in the field of education.

When researchers desire to investigate the complex nature of how social interactions influence thoughts and behaviors in schools, *school climate* is a more appropriate term. Like school culture, it has a broad and somewhat unclear definition (Hoy, 1990). Although terminology regarding school climate has changed throughout recent history, some current definitions exist. “School climate is the relatively enduring quality of the school environment that is experienced by participants, affects their behavior, and is based on their collective perceptions of behavior in schools” (Hoy, 1990, p. 152). The National School Climate Council (2007) stated that climate is, “based on patterns of people’s experiences of school life and reflects norms, goals,

values, interpersonal relationships, teaching and learning practices, and organizational structures” (p. 5). It is important to keep in mind that school climate is grounded in one’s experiences and that climate influences one’s behavior.

In an attempt to understand the concept of climate through a metaphor, Hoy (1990) described it this way: climate is to organization as personality is to the individual. Each organization has a unique climate just as each personality is unique to the individual. However, in light of this metaphor, there also exist commonalities between schools’ climates just as there are commonalities between individuals’ personalities.

To be fully understood, school climate should be viewed as a collective rating from several stakeholders. Climate is more than an individual perception; it is a perception of a group (Cohen, McCabe, Michelli, & Pickeral, 2009). Assessing school climate begins with the individual but must be understood through a collective lens.

Differentiating culture from climate, as well as developing an accurate and comprehensive definition of climate, supports the purpose of measuring school climate as a construct. It is important to keep in mind that the purpose to studying climate is to evaluate effective change strategies (Hoy, 1990).

Impact of Positive School Climate

The Minnesota Department of Education (MDE) has joined several other states’ departments of education by focusing on school climate reform to meet goals related to school improvement. School climate strongly influences student

motivation and leads to higher academic achievement (Minnesota Department of Education, 2015).

As schools in Minnesota, and across the country, investigate ways to increase students' academic performance, they continue to look at the area of school climate. A review of climate indicates that school personnel are supported in the process of continuous improvement through their own awareness of school climate (Zullig et al., 2010).

Research provides associations and outcomes related to positive school climate. School climate reform is suggested as a data-driven strategy that promotes healthy relationships, connectedness in school, and decreased school dropout (Centers for Disease Control and Prevention, 2009). The Institute for Educational Sciences in *Dropout Prevention* stated that a focus on improving school climate is a useful strategy for dropout prevention (Dynarski et al., 2008). In addition, a recent review of school climate literature points out that,

The ever-growing body of research on school climate continuously attests to its importance in a variety of overlapping ways, including social, emotional, intellectual, and physical safety; positive youth development, mental health, and health relationships; higher graduation rates; school connectedness and engagement; academic achievement; social, emotional, and civic learning; teacher retention; and effective school reform. (Thapa et al., 2013, p. 3)

In summary, sustained school climate is associated with increased academic achievement, risk prevention, health efforts, and overall teacher satisfaction (Cohen,

McCabe et al., 2009). Developing and sustaining a healthy school climate is of great importance in all schools.

Through investigation of related literature, five domains of school climate emerge, including: safety, relationships, teaching and learning, the environment, and larger organizational patterns (Cohen, McCabe et al., 2009; Thapa et al., 2013; Zullig et al., 2010). Below is a summary of the research by domain and should be noted that the domains are related and influence one another.

Safety.

The first domain of school climate is safety. Safety is a fundamental need of every human (Maslow, 1943). However, up to 25% of American students are bullied each year (Melton et al., 1998). Forms of bullying include biased remarks, verbal harassment, physical harassment, electronic harassment, and assault. In a sample of over 8,500 students between the ages of 13 and 20 representing all 50 states, 63.5% of students felt unsafe because of their sexual orientation (Kosciw, Greytak, Bartkiewicz, Boesen, & Palmer, 2012). Bullying over time has negative psychosocial effects for both the bully and the victim (Wolke, Woods, Bloomfield, & Karstadt, 2000).

Lack of positive climate, which includes a perceived lack of safety, is often accompanied by high absenteeism and lowered student achievement (Astor, Guerra, & Van Acker, 2010). When school-wide behavior interventions, directed to support all students, were implemented, classroom behavior improved (Fonagy et al., 2009). School safety is not limited to simply students' perceptions; it includes teachers'

perception of safety as well (Dworkin, Haney, & Telschow, 1998; Gregory, Henry, & Schoeny, 2007).

Relationships.

A second domain of school climate is relationships. Teaching and learning is fundamentally relational between ourselves and others as well as within ourselves (Thapa et al., 2013). Healthy school climates—those that are safe, caring, and responsive—provide the best foundation for social, emotional, and academic learning (Blum, McNeely & Rinehart, 2002; Goodenow & Grady, 1993; Lee, Smith, Perry, & Smylie, 1999; Osterman, 2000).

Regarding student-teacher relationships, interactions with the teacher can directly impact students' engagement in the classroom (Skinner & Belmont, 1993). Negative or conflicting relationships between a child and the teacher in kindergarten will have a higher chance of behavioral and academic problems in later grades (Hamre & Pianta, 2001).

Looking at student-student relationships, positive perceptions of racial climate were associated with higher student achievement and fewer discipline issues (Mattison & Aber, 2007). Negative racial climate was found to be an obstacle to college preparation (Griffin & Allen, 2006). Proactive approaches to building school climate among all ethnic groups were most successful, rather than passive or reactive approaches (Soukamneuth, 2004). Relationships in schools are of the utmost importance.

Teaching and learning.

A third domain of school climate is teaching and learning, which is grounded in the building of relationships. Climate impacts the level of respect and mutual trust present in the building, which improves the learning environment (Ireland, Kerr, Lopes, Nelson, & Cleaver, 2006). Hamre and Pianta (2001) found that positive climate and student-teacher relationships were related to academic success and positive behavior later in life. School climate influences student participation and with increased student participation, students' potential for learning increases (Ladd, Birch, & Buhs, 1999; Voelkl, 1995). Teachers' perceptions of school climate also have a positive relationship with student achievement as Johnson and Stevens (2006) identified.

In a correlational study of school climate variables and student achievement, Brookover et al. (1978) revealed that climate makes a difference in academic achievement. This relationship is supported by other studies as well (Cook, Murphy, & Hunt, 2000; Gottfredson & Gottfredson, 1989; Griffith, 1995; MacNeil, Prater, & Busch, 2009).

The role of the principal in establishing and sustaining a positive climate is important. "Through communication, the principal leads and unifies his or her staff members in the work necessary for academic results and school improvement" (Arlestig, 2007, p. 263). When teachers feel supported by their principal and peers, teacher commitment is higher (Singh & Billingsley, 1998). Positive climate is associated with teachers' beliefs that they can impact learning (Hoy & Woolfolk, 1993), increased teacher retention (Fulton, Yoon, & Lee, 2005), and minimized

teacher exhaustion and other negative feelings (Grayson & Alvarez, 2008; Higgins-D'Alessandro, 2002).

Institutional environment.

A fourth domain of school climate refers to the institutional environment, which includes the physical environment as well as student connectedness. Regarding the physical environment, school facilities impact school climate, and climate impacts achievement (Uline & Tschannen-Moran, 2008). For example, school size has been identified as a factor. McNeely, Nonnemaker, and Blum (2002) found that the size of the school is negatively associated with school connectedness. Students can be in smaller learning communities, the learning environment is improved (Cotton, 2001). Smaller learning experiences impact one's ability to connect to others and also impacts supervision. Students feel unsafe when they are unsupervised (Astor et al., 2010).

Variables such as classroom layout and activities schedules can influence students' behaviors and feelings of safety (Conroy & Fox, 1994; Van Acker & Grant, 1996). It is important to consider that, "A school that does not attend to this factor [safe and orderly environment] risks undermining all other efforts at school improvement" (Marzano, 2003, p. 54). Physical environment is key to positive school climate.

Another aspect is student connectedness. The Centers for Disease Control and Prevention (2009) defined student connectedness as, "the belief by students that adults and peers in the school care about their learning as well as about them as individuals" (p. 3). School connectedness is a predictor of adolescent health and

academic outcomes (McNeely et al., 2002; Ruus et al., 2007; Whitlock, 2006). It is associated with violence prevention (Karcher, 2002, 2004), fewer student conduct problems (Loukas, Suzuki, & Horton, 2006), and has been found to be a protective factor against risky sexual violence and drug use (Catalano, Haggerty, Oesterle, Fleming, & Hawkins, 2004; Kirby, 2001).

School improvement.

School Improvement is the fifth domain of school climate. This domain involves school leadership and the combination of other domains towards the goal of continual reflection and improvement. School leadership is crucial to overall school improvement (Hess & Kelly, 2007). Principals lead and unify the staff in the necessary work of increasing achievement and promoting school improvement (Arlestig, 2007). With the changes in education today (i.e., the rise of charter schools, school choice, flexible teacher compensation, and changes in hiring practices), the degree to which a school improves may be determined by the quality of leadership in the school (Hess & Kelly, 2007).

School improvement efforts are brought about with a high sense of trust. Trust is important in building professional capacity, norms, community relationships, and growth in instruction (Bryk, 2010; Bryk & Schneider, 2003). “The presence of trust and open communication between the teacher and the principal permits the ongoing and constructive questioning of existing assumptions and beliefs that serve as the foundation of the day-to-day operations and instructional practices in schools” (Rafferty, 2003, p. 68).

Measuring School Climate

Organizational climate is usually studied as an independent variable - that which influences other outcomes. However, organizational climate can also be studied as a dependent variable. Climate can and does change and little is known about what the precursors of such change (Hoy, 1990). Although researchers have found, and continue to find, empirically grounded outcomes of a positive school climate, there is a gap in the literature regarding empirically measured principal behaviors that may correlate towards creating and sustaining positive school climate in today's schools (Rafferty, 2003).

Many instruments exist that seek to assess organizational climate in schools. In *Assessing School Climate: An Important Step for Enhancing School Quality*, Wichter (1993) listed several school climate instruments, which can be used for the purpose of assessing school climate. By using tools such as these, school administrators are able to more accurately determine strengths and opportunities of growth within the school, which can be used for school improvement efforts (Wichter, 1993).

As one of the most referenced measures of elementary school climate (Wichter, 1993), the OCDQ by Halpin and Croft (1963) has been revised into three versions: one for elementary schools, one for middle schools and one for secondary schools. The revised version for elementary schools became known as the Organizational Climate Description Questionnaire – Revised Elementary (OCDQ-RE) by Hoy and Clover (1986) and will be used in this study (see Appendix C). This comprehensive questionnaire consists of 42 items, which are all measured on a 4-

point Likert scale. The OCDQ-RE covers six dimensions of organizational climate including: supportive, directive, and restrictive principal behavior dimensions as well as collegial, intimate, and disengaged teacher behavior dimensions (see Appendix D). Reliability scores were relatively high for each dimension, ranging from 0.78 to 0.94 (Hoy, Tarter, & Kottkamp, 1991). The construct validity was measured and the index of teacher openness correlated positively with the original general school openness ($r = 0.67, p < .01$), as did the index of principal openness ($r = 0.52, p < .01$). Factor analysis supports the construct validity.

The OCDQ-RE measures six dimensions of school climate (three dimensions of principal behaviors and three dimensions of teacher behaviors). When analyzed, scores in each of these dimensions identifies the level of principal openness and teacher openness. These scores identify one of four types of school climate that exist (open climate, engaged climate, disengaged climate, and closed climate) as displayed in Table 2. The most desirable climate is considered to be open.

Table 2

Openness Matrix

		Principal Openness	
		Open	Closed
Teacher Openness	Open	OPEN CLIMATE	ENGAGED CLIMATE
	Closed	DISENGAGED CLIMATE	CLOSED CLIMATE

Principal Communication Behaviors and School Climate

When considering how to measure principals' communication and its possible impact on school climate, it is important to keep in mind, that it is most important what teachers perceive rather than what principals say or do (Weathers, 2011). Teachers' perceptions of their principal's communication style are the lens through which significant impact can be measured.

The impact of principals on a school has been documented in a variety of studies. In a quantitative study of over 2,000 middle and high school students, it was concluded that school leaders set the tone for how to behave, which impacts staff and ultimately impacts students (Zullig et al., 2010). Findings from a small-scale study in Sweden suggested that communication is what principals used to lead and unify staff in increasing academic achievement and school improvement (Arlestig, 2007). In a study to investigate the impact of principal leadership on teachers' sense of community, Weathers (2011) concluded that leaders develop and sustain a sense of community in the school through their leadership and in creating positive climate that supports the emotional needs of teachers. Principals impact school climate.

The fact that leadership effects on school achievement appear to be indirect is neither cause for alarm nor dismay. As noted previously, achieving results through others is the essence of leadership. A finding that principal effects are mediated by other in-school variables does nothing whatsoever to diminish the principal's importance. Understanding the routes by which principal can improve outcomes through working with others is itself a worthy goal of research. Most important with respect to this point, the research illustrates

that these effects appear to compound as principals pursue school-level action.
(Hallinger & Heck, 1996, p. 39)

Simply acknowledging a principal's general impact on school climate is not enough. More needs to be investigated through the study of school climate as it helps leaders determine strategies of effective change (Hoy, 1990). A baseline understanding of school climate is needed even when not one definition exists that is accepted by all (Thapa et al., 2013). Effective leaders need to have a realistic view of the importance of communication as well as the direct and indirect effects that result from their communications (Arlestig, 2007). An indicator of success in the principalship is to be able to influence teachers effectively (Hoy et al., 1991). The level to which that influence exists in a given school can be related to the level of communication effectiveness. "Communication is as vital in organizational processes as learning. The relationship between school leaders and different aspects of the communication process needs to be explored further" (Arlestig, 2007, p. 272).

Chapter Three: Methodology

This study utilized a quantitative design with a survey method. The purpose was to explore the relationship between principal communication styles and school climate. This relationship, if any, was viewed through the lens of teachers in Title 1 elementary schools in a Midwest state.

Research Design

Realizing the gaps in research that existed, an investigation of the possible relationships between principal communication style as the independent variable and school climate as the dependent variable emerged. The purpose of this study was to see if a statistically significant relationship existed between principal communication style and school climate as perceived by elementary teachers in high achieving, Title 1 elementary schools in a Midwest state. A quantitative survey method was used.

Research Question(s)

In an effort to strengthen the research in the area of improving school climate, this study enhanced the research base by investigating dimensions of principal communication style and school climate from the perspective of teachers. This study investigated the following six research questions:

RQ 1. What relationship, if any, exists between Expressiveness and school climate?

RQ 2. What relationship, if any, exists between Preciseness and school climate?

RQ 3. What relationship, if any, exists between Verbal Aggressiveness and school climate?

RQ 4. What relationship, if any, exists between Questioningness and school climate?

RQ 5. What relationship, if any, exists between Emotionality and school climate?

RQ 6. What relationship, if any, exists between Impression Manipulativeness and school climate?

Hypotheses

In light of the six research questions regarding principal communication style and school climate, the following hypotheses emerged:

H1₀: There is no significant relationship between Expressiveness and principal openness.

H1₁: There is a significant relationship between Expressiveness and principal openness.

H2₀: There is no significant relationship between Expressiveness and teacher openness.

H2₁: There is a significant relationship between Expressiveness and teacher openness.

H3₀: There is no significant relationship between Preciseness and principal openness.

H3₁: There is a significant relationship between Preciseness and principal openness.

H4₀: There is no significant relationship between Preciseness and teacher openness.

H4₁: There is a significant relationship between Preciseness and teacher openness.

H5₀: There is no significant relationship between Verbal Aggressiveness and principal openness.

H5₁: There is a significant relationship between Verbal Aggressiveness and principal openness.

H6₀: There is no significant relationship between Verbal Aggressiveness and teacher openness.

H6₁: There is a significant relationship between Verbal Aggressiveness and teacher openness.

H7₀: There is no significant relationship between Questioningness and principal openness.

H7₁: There is a significant relationship between Questioningness and principal openness.

H8₀: There is no significant relationship between Questioningness and teacher openness.

H8₁: There is a significant relationship between Questioningness and teacher openness.

H9₀: There is no significant relationship between Emotionality and principal openness.

H9₁: There is a significant relationship between Emotionality and principal openness.

H10₀: There is no significant relationship between Emotionality and teacher openness.

H10₁: There is a significant relationship between Emotionality and teacher openness.

H11₀: There is no significant relationship between Impression Manipulativeness and principal openness.

H11₁: There is a significant relationship between Impression Manipulativeness and principal openness.

H12₀: There is no significant relationship between Impression Manipulativeness and teacher openness.

H12₁: There is a significant relationship between Impression Manipulativeness and teacher openness.

Sample

In the 2014-2015 school year in Minnesota as reported by the Minnesota Department of Education's website (2015), there were 28,015 teachers in grades kindergarten through Grade 6. These teachers worked in 955 public elementary schools (identified as Pre-Kindergarten through Grade 6). The schools were located in 328 public school districts.

The sample in this study was determined based on purposive sampling of elementary schools that received Title 1 funds during the 2015-16 school year. Title 1 funds provide financial assistance to schools with high percentages of children from low-income families to help support the success for all (United States Department of Education, 2015).

Of the Minnesota elementary schools receiving Title 1 funding, the top performing 15% were honored as Reward Schools by the Minnesota Department of Education. Reward Schools were identified based on the MMR (multiple measures rating). Identified annually, these were the highest performing on the four domains of the MMR. The four domains of the MMR included student data relating to: proficiency, growth, achievement gap reduction, and graduation rates.

Of the 119 high achieving schools identified in 2015-16 as Reward Schools, three metropolitan schools were selected at random and three rural schools were selected at random. A total of six schools were surveyed. The list of 2015-16 Reward Schools was printed off the Minnesota Department of Education (MDE) website. Schools were considered metropolitan if they were located in the Minnesota Metro Area Public Schools Districts 2014-15 School Year map. Schools were considered rural if they were located elsewhere in the state of Minnesota. Each school was assigned a number from 1 to 119. Using the website <https://random.org>, the minimum and maximum was set (i.e., 1 and 119 respectively) and a random number was generated by the website. The corresponding school was contacted for participation in the study. Another number was randomly generated, which corresponded to a different school. The process continued until three metropolitan and three rural schools were identified.

These six schools were contacted via telephone call to request participation. If a school declined participation, another school in the same category (i.e., metropolitan or rural) was randomly selected and then contacted to request participation in the study. Once permission was granted for a school to participate, all

teachers at that school were contacted via email (see Appendix A) requesting their individual participation. If a response was not received within two weeks of the initial email, a follow up email was sent (see Appendix B).

The sample was limited to Minnesota to ensure consistency criteria for participation of schools (i.e., Minnesota Reward Schools). As there were no similar studies regarding a relationship between teachers' perceptions of principal communication style and school climate at the elementary level, it was believed that this study would begin to address the gap in the available literature.

Setting

The setting of this study included six public elementary schools across the state of Minnesota that received federal Title 1 funding in 2015-16. In addition, each school was identified in the top 15% of Title 1 schools by the Minnesota Department of Education through the use of multiple measure ratings. Multiple measure ratings included the areas of proficiency, growth, achievement gap reduction, and graduation rates.

Instrumentation

Two instruments were used to measure teacher perceptions of principal communication style and perceptions of school climate. The first instrument was the Communication Style Inventory (CSI) and the second was the Organizational Climate Description Questionnaire - Revised Elementary (OCDQ-RE). It was estimated that completing both surveys would take respondents approximately 20 minutes.

The first instrument used in this study is the Communication Styles Inventory (CSI), which consisted of a six-dimensional model based in a behavioral view of

communication style research combined with deception and impression management research (see Appendix E). The six communication style dimensions included: Expressiveness, Preciseness, Verbal Aggressiveness, Questioningness, Emotionality, and Impression Manipulativeness (De Vries et al., 2013). Results offered support of the Communication Styles Inventory (CSI) in terms of psychometrics and in alignment with lexical communication dimensions and other communication style instruments (De Vries et al., 2013). All communication style facets, except the Impression Manipulativeness facet Inscrutableness, loaded on their designated factors and all had high reliability of greater than 0.80. Cronbach reliabilities ranged from 0.82 to 0.88 in the community sample and from 0.83 to 0.87 in the student sample (De Vries et al., 2013). The CSI scales showed medium to high levels of convergent validity with lexical communication marker scales and behavior oriented communication scales. On the whole, the within-instrument correlations provided support for the distinctiveness of the CSI scales (De Vries et al., 2013).

As one of the most referenced measures of elementary school climate (Wichter, 1993), the Organizational Climate Description Questionnaire by Halpin and Croft (1963) had been revised into three versions: one for elementary school, one for middle school and one for secondary school. The revised version for elementary grades became known as the Organizational Climate Description Questionnaire – Revised Elementary (OCDQ-RE) by Hoy and Clover (1986) and was used in this study. This comprehensive questionnaire consisted of 42 items, which were all measured on a 4-point Likert scale. The OCDQ-RE covered six dimensions of organizational climate including: supportive, directive, and restrictive principal

behavior dimensions as well as collegial, intimate, and disengaged teacher behavior dimensions. Reliability scores were relatively high for each dimension, ranging from 0.78 to 0.94 (Hoy, Tarter, & Kottkamp, 1991). The construct validity was measured and the index of teacher openness correlated positively with the original general school openness ($r = 0.67, p < 0.01$), as did the index of principal openness ($r = 0.52, p < 0.01$). Factor analysis supported construct validity. Scores in these six dimensions revealed the level of principal openness and level of teacher openness. These openness scores identified one of four types of school climate that existed (i.e., open climate, engaged climate, disengaged climate, and closed climate). The most desirable climate was an open climate.

Data Collection

With the improvement of online survey tools (e.g., Qualtrics, Survey Monkey® and Google Forms), conducting the survey via email provided an opportunity to reach the largest number of potential respondents. In utilizing an online survey, respondents received the most convenient opportunity to participate, thus increasing the chances of improving the response rate. Responses were stored digitally and instantly once a respondent completed the survey.

To ensure the highest response rate possible, it was acknowledged that there were both opportune and inopportune seasons of the school year to survey teachers. For instance, September and May were inopportune months as the beginning and end of the school year were very busy for teachers. The surveys used in this study were distributed during the months of November, December, and January. After the email was first sent, a follow up email survey reminder was sent two weeks later. The

season of year in which the survey was administered to teachers was taken into consideration to receive the highest response rate possible.

Data Analysis

The original OCDQ was first developed to use the individual as the unit of analysis (Hoy & Clover, 1986). The revised OCDQ-RE sought to represent school climate as a collective representation of multiple stakeholders and uses the school as the unit of analysis (Hoy & Clover, 1986). Due to goals of this study, teacher perceptions were gathered and analyzed on an individual level.

Prior to analyzing data in Minitab an overall perception score for each teacher in the area of school climate was calculated. Responses on the OCDQ-RE were ultimately used to identify one general perception of school climate (i.e., open climate, engaged climate, disengaged climate, or closed climate).

The 42 items on the OCDQ-RE varied along a four-point scale defined by “rarely occurs”, “sometimes occurs”, “often occurs”, and “frequently occurs.” Appendix C lists all items in the OCDQ-RE. Each item was scored 1-4 respectively with items 6, 31, and 37 reverse scored. Then the following items (see Table 3) were summed to represent the teacher’s perception in that area. For a more robust organization of all items on the OCDQ-RE organized by dimension, see Appendix D.

Table 3

OCDQ-RE Item Numbers by Dimension

School Climate Dimension	Items to sum (* = reverse scored)
Supportive Behavior	4, 9, 15, 16, 22, 23, 28, 29, 42
Directive Behavior	5, 10, 17, 24, 30, 34, 35, 39, 41

Restrictive Behavior	11, 18, 25, 31*, 36
Collegial Behavior	1, 6*, 12, 19, 26, 32, 37*, 40
Intimate Behavior	2, 7, 13, 20, 27, 33, 38
Disengaged Behavior	3, 78, 14, 21

These summed scores represented the school's climate profile. In order to make comparisons, a standardized score needed to be found. To do so, the mean and standard deviation of each dimension was calculated (see Table 4).

Table 4

OCDQ-RE Mean and Standard Deviation by Dimension

		Mean (M)	Standard Deviation (SD)
Principal Openness	Supportive Behavior (S)	28.85	5.57
	Directive Behavior (D)	15.89	4.16
	Restrictive Behavior (R)	10.68	2.72
Teacher Openness	Collegial Behavior (C)	24.59	3.65
	Intimate Behavior (Int)	19.27	4.33
	Disengaged Behavior (Dis)	6.53	1.92

By using the following formulas, standardized scores (SdS) were calculated for each dimension:

$$\text{SdS for S} = 100 \times (S - 28.85) / 5.57 + 500$$

$$\text{SdS for D} = 100 \times (D - 15.89) / 4.16 + 500$$

$$\text{SdS for R} = 100 \times (R - 10.68) / 2.72 + 500$$

$$\text{SdS for C} = 100 \times (C - 24.59) / 3.65 + 500$$

$$\text{SdS for Int} = 100 \times (\text{Int} - 19.27) / 4.33 + 500$$

$$\text{SdS for Dis} = 100 \times (\text{Dis} - 6.53) / 1.92 + 500$$

These standardized scores were used to compute a general index of principal openness and of teacher openness.

$$\text{Principal Openness} = [(SdS \text{ for S}) + (1000 - SdS \text{ for D}) + (1000 - SdS \text{ for R})] / 3$$

$$\text{Teacher Openness} = [(SdS \text{ for C}) + (SdS \text{ for Int}) + (1000 - SdS \text{ for Dis})] / 3$$

An openness index of 500 or above was considered open. Conversely, an openness index of 499 or less was considered closed. When indices were calculated for principal and teacher openness, one general school climate perception was identified. The possible school climates are shown in Table 2. They include open climate, engaged climate, disengaged climate, and closed climate.

After a single school climate perception was identified for each teacher, a single perception was calculated for each of the six communication styles for each teacher. The 96 items on the CSI varied along a five-point scale ranging from “completely disagree” to “completely agree.” Each item was scored 1-5 respectively to generate a single score for each communication style. Table 5 displays the six communication styles as well as the item numbers that made up that style dimension.

Table 5

Communication Style Inventory Questions by Dimension

Communication Style Dimensions	Items to sum (* = reverse scored)
Expressiveness	1, 7, 13, 19*, 25, 31, 37*, 43, 49*, 55, 61, 67, 73, 79, 85, 91*
Preciseness	2, 8, 14, 20, 26*, 32, 38, 44, 50, 56*, 62, 68*, 74, 80, 86, 92
Verbal Aggressiveness	3, 9*, 15*, 21*, 27*, 33, 39, 45*, 51, 57, 63, 69*, 75, 81, 87, 93*

Questioningness	4, 10*, 16, 22, 28, 34, 40*, 46, 52, 58*, 64, 70, 76, 82, 88, 94
Emotionality	5, 11, 17, 23, 29*, 35, 41, 47*, 53, 59, 65*, 71, 77, 83, 89, 95
Impression Manipulativeness	6, 12, 18, 24, 30, 36, 42, 48, 54, 60*, 66, 72*, 78, 84, 90*, 96*

Item responses on each communication style of the CSI were summed and those sums were sorted to identify high (upper 50%) and low (lower 50%) categories for the population surveyed. Six communication style perception scores for each teacher were identified. The independent variables were the six principal communication style dimensions and the dependent variables were principal openness and teacher openness. The data were then entered into Minitab for further analysis.

To investigate if a significant relationship existed between each principal communication style and school climate, Pearson's r was calculated using a significance level of $p < 0.05$. Additionally, to investigate the predictive value, if any, of the relationship between each communication style and the openness indices, a multiple regression analysis was calculated using a significance level of $p < 0.05$.

The significance of investigating the relationship between principal communication style and school climate is threefold. First, results provide elementary school principals insight into the vast area of communication. Second, results inform principal preparation programs with necessary data about how to prepare effective leaders. Third, results shed light into next steps in terms of

communication research. Investigating principal communication behaviors and school climate is important in our ever-changing world.

Delimitations and Limitations

This study included limitations, which are influences out of the control of the researcher. A common obstacle in studies employing quantitative research methods is low response rates. Due to this possibility, the researcher contacted selected schools through multiple communication methods (i.e., phone call and email) as well as through follow up communications. As responses were voluntary and anonymous, lack of honesty in responses posed little concern in this study.

The decision to limit this study through purposive sampling of high-achieving Title 1 public elementary schools provided insight into the communication style of effective school principals. Also, this study limited perceptions of school climate to only those of teachers. The researcher acknowledged that a comprehensive view of school climate included perspectives of many stakeholders; however, for the purpose of investigating a relationship with the stated variables, perceptions were limited to those of teachers.

Using this setting and sample offered an advantage and a disadvantage. An advantage of this sampling type was that it allowed the researcher to be more purposeful to investigate responses only from high achieving schools that receive federally allocated Title 1 funds. A disadvantage was that it was difficult to defend the representativeness of the sample to a larger population. Even with the obstacle of this sampling type, this study began to offer insight into the proposed research questions.

Ethical Considerations

This study was reviewed and approved through the Institutional Review Board (IRB) at Bethel University. It appeared to have minimal risk to the human subjects. The topics of the survey questions involved perceptions of principal communications and the effects communication had on school climate. The impact on subjects was minimal, confidentiality was kept, coercion was not used, and consent was attained (Roberts, 2004). All respondents agreed to a statement of consent prior to their participation in the study. According to *The Belmont Report* (1979), this study ensured high standards regarding respect for persons, beneficence, and justice.

Chapter Four: Results

An indicator of success in the role of the principalship is to positively influence “trust, commitment, effectiveness, and school quality” (Hoy & Tarter, 1997). Teachers make up the largest sub-group within a school organization and one way to impact them is to utilize effective communication. More research is needed in the area of effective principal communication (Arlestig, 2007) as well as in the principals’ role in creating positive school climate (Hoy et al., 1991).

Results

This study investigated perceived principal communication styles and school climate, from the perspective of teachers, in Title 1 Rewards Schools in a Midwest state. Results of this study inform future research as well as guide practicing and aspiring school leaders as they seek to improve their practice. This study investigated the following six research questions:

RQ 1. What relationship, if any, exists between Expressiveness and school climate?

RQ 2. What relationship, if any, exists between Preciseness and school climate?

RQ 3. What relationship, if any, exists between Verbal Aggressiveness and school climate?

RQ 4. What relationship, if any, exists between Questioningness and school climate?

RQ 5. What relationship, if any, exists between Emotionality and school climate?

RQ 6. What relationship, if any, exists between Impression Manipulativeness and school climate?

Sample

Principals representing randomly selected Title 1 Reward Schools in a single Midwest state were invited to share this study's survey with their teachers. It was the researcher's intent to have six schools participate. Six schools were initially contacted. If a school declined participation or did not respond within two weeks (with a reminder voice message and a reminder email), the researcher sought out another school for participation. In all, 15 schools were contacted. Eight principals did not respond or declined participation. Seven principals accepted the invitation to participate by sharing this study's survey link with their teaching staff. To ensure confidentiality, the study's survey link was to be provided to all teachers at a given school. However, the researcher learned that the link was shared with only select teachers in one school, thus that school's responses were removed from the sample. Seventy-four responses were received from the six remaining schools. Of those responses, eight included incomplete data and were thus removed from the sample. In total, 66 surveys ($n = \text{sample}$) were completed and used in the analysis. A maximum of 188 possible teachers ($N = \text{population}$) could have responded across all six schools, which reveals an overall response rate of 35.1%. Of the six schools that participated, three schools were from rural regions of the state and three schools were from a metropolitan region of the state, as identified by the Minnesota Department of Education website. Response rates by school and of all possible participants are summarized in Table 6.

Table 6

Response Rate by School

Region	School	Possible Teachers* (N = population)	Complete Surveys Received (n = sample)	Response Rate
Metro	A	40	5	12.5%
Metro	B	39	20	51.7%
Metro	C	42	18	43.2%
Rural	D	24	7	28.6%
Rural	E	20	9	44.7%
Rural	F	23	7	30.2%
Total		188	66	35.1%

*As reported on the Minnesota Report Card at <http://rc.education.state.mn.us/>.

When determining the internal consistency of both instruments, it was found that Cronbach’s α values were within an acceptable range of 0.7000 – 0.7999. The value for internal consistency of each instrument is provided in Table 7.

Table 7

Instrument Reliability

Instrument	Cronbach's α
Organizational Climate Description Questionnaire – Revised Elementary (OCDQ-RE)	0.7637
Communication Style Inventory (CSI)	0.7889

The school climate scores of each respondent were organized and standardized to generate a general index of both principal openness and teacher openness. Those indices were used to identify an overall school climate designation

(i.e., open, engaged, disengaged, or closed). As Table 8 displays, 27 teachers identified their school as having an overall “open” school climate.

Table 8

OCDQ-RE Overall School Climate Description Frequencies

Overall Climate Description	<i>n</i>
Open	27
Engaged	8
Disengaged	12
Closed	19

Transformation of Data

The six communication styles as the independent variables and the two openness indices as the dependent variables were not normally distributed (see Table 9) and were transformed using Box-Cox Transformation or Johnson Transformation. The results of the transformations were that the data became normally distributed and equal in variance, allowing for the researcher to conduct parametric statistical analysis (see Table 10). Box-Cox Transformation is regarded as a best practice for cleaning and transforming data, and is widely accepted in the literature (Osborne, 2010). One danger of utilizing the Box-Cox Transformation is that results can sometimes have inversed signs. For two variables – Expressiveness and Verbal Expressiveness – the sign was inversed and thus Johnson Transformation was used for these variables. Johnson Transformation is a powerful transformation that helps to achieve normality (Johnson, 1978). Each variable was processed using optimal λ in the statistical software, Minitab. After each variable was transformed (whether by

Box-Cox or Johnson Transformations), the researcher conducted tests for equal variances and Ryan-Joiner normality tests, and found that all transformations were successful in normalizing the data.

Table 9

Before Data Transformation

Variable	Category	Normally Distributed?	Symmetric?	Equal Variances?
Principal Openness	Dependent	No	No	
Teacher Openness	Dependent	No	No	
Expressiveness	Independent	Yes	No	Yes
Preciseness	Independent	No	No	Yes
Verbal Aggressiveness	Independent	No	No	No
Questioningness	Independent	Yes	No	Yes
Emotionality	Independent	Yes	No	Yes
Impression Manipulativeness	Independent	Yes	No	Yes

Table 10

After Data Transformation (Box Cox or Johnson Transformations)

Variable	Category	Normally Distributed?	Symmetric?	Equal Variances?
Principal Openness	Dependent	Yes	N/A	Yes
Teacher Openness	Dependent	Yes	N/A	Yes
Expressiveness	Independent	Yes	N/A	Yes
Preciseness	Independent	Yes	N/A	Yes
Verbal Aggressiveness	Independent	Yes	N/A	Yes
Questioningness	Independent	Yes	N/A	Yes
Emotionality	Independent	Yes	N/A	Yes

Impression Manipulativeness	Independent	Yes	N/A	Yes
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Note: Variables in boldface were transformed using Johnson Transformation. All other variables were transformed using Box Cox Transformation.

Pearson’s Correlation Coefficient Analysis

To determine if a significant relationship existed between each of the six communication styles and principal openness, the Pearson’s Correlation Coefficient (i.e., Pearson’s r) was calculated. Likewise, Pearson’s r was calculated to determine if a significant relationship exists between each of the six communication styles and teacher openness. Correlation does not imply causation; however, the investigation identified if a statistically significant relationship existed between variables.

Table 11 shows the generally accepted adjectives that are used to describe associations between variables with a specific r -value (Miller, 1998).

Table 11

Adjectives for Correlational Relationships

r -value	Adjective
1.00	Perfect
0.70 - 0.99	Very High
0.50 - 0.69	Substantial
0.30 - 0.49	Moderate
0.10 - 0.29	Low
0.01 - 0.09	Negligible

Pearson’s r was reported for each set of hypotheses in this study and p -values of < 0.05 indicate a statistically significant relationship existed. Table 12 summarizes

the results for Principal Openness and Table 13 summarizes the results for Teacher Openness.

H1₀: There is no significant relationship between Expressiveness and principal openness.

H1₁: There is a significant relationship between Expressiveness and principal openness.

The relationship between Expressiveness and principal openness was found to be $r = -0.239$, $p = 0.053$. There is no statistically significant relationship between these two variables. The conclusion is to fail to reject the null hypothesis.

H2₀: There is no significant relationship between Expressiveness and teacher openness.

H2₁: There is a significant relationship between Expressiveness and teacher openness.

The relationship between Expressiveness and teacher openness was found to be $r = 0.116$, $p = 0.355$. There is no statistically significant relationship between these two variables. The conclusion is to fail to reject the null hypothesis.

H3₀: There is no significant relationship between Preciseness and principal openness.

H3₁: There is a significant relationship between Preciseness and principal openness.

The relationship between Preciseness and principal openness was found to be $r = 0.204$, $p = 0.1$. There is no statistically significant relationship between these two variables. The conclusion is to fail to reject the null hypothesis.

H4₀: There is no significant relationship between Preciseness and teacher openness.

H4₁: There is a significant relationship between Preciseness and teacher openness.

The relationship between Preciseness and teacher openness was found to be $r = 0.242, p = 0.05$. There is no statistically significant relationship between these two variables. The conclusion is to fail to reject the null hypothesis.

H5₀: There is no significant relationship between Verbal Aggressiveness and principal openness.

H5₁: There is a significant relationship between Verbal Aggressiveness and principal openness.

The relationship between Verbal Aggressiveness and principal openness was found to be $r = -0.485, p = 0$. There is a statistically significant relationship between these two variables. The conclusion is to reject the null hypothesis. With an r -value of -0.485 , the linear association is negative and considered moderate (Miller, 1998). In this study's sample, teachers that perceived higher degrees of Verbal Aggressiveness perceived lower degrees of principal openness.

H6₀: There is no significant relationship between Verbal Aggressiveness and teacher openness.

H6₁: There is a significant relationship between Verbal Aggressiveness and teacher openness.

The relationship between Verbal Aggressiveness and teacher openness was found to be $r = -0.337, p = 0.006$. There is a statistically significant relationship

between these two variables. The conclusion is to reject the null hypothesis. With an r -value of -0.337, the linear association is negative and considered moderate (Miller, 1998). In this study's sample, teachers that perceived higher degrees of Verbal Aggressiveness perceived lower degrees of teacher openness.

H7₀: There is no significant relationship between Questioningness and principal openness.

H7₁: There is a significant relationship between Questioningness and principal openness.

The relationship between Questioningness and principal openness was found to be $r = -0.088$, $p = 0.481$. There is no statistically significant relationship between these two variables. The conclusion is to fail to reject the null hypothesis.

H8₀: There is no significant relationship between Questioningness and teacher openness.

H8₁: There is a significant relationship between Questioningness and teacher openness.

The relationship between Questioningness and teacher openness was found to be $r = -0.041$, $p = 0.745$. There is no statistically significant relationship between these two variables. The conclusion is to fail to reject the null hypothesis.

H9₀: There is no significant relationship between Emotionality and principal openness.

H9₁: There is a significant relationship between Emotionality and principal openness.

The relationship between Emotionality and principal openness was found to be $r = -0.25, p = 0.043$. There is a statistically significant relationship between these two variables. The conclusion is to reject the null hypothesis. With an r -value of -0.25 , the linear association is negative and considered low (Miller, 1998). In this study's sample, teachers that perceived higher degrees of Emotionality perceived lower degrees of principal openness.

H10₀: There is no significant relationship between Emotionality and teacher openness.

H10₁: There is a significant relationship between Emotionality and teacher openness.

The relationship between Emotionality and teacher openness was found to be $r = -0.061, p = 0.626$. There is no statistically significant relationship between these two variables. The conclusion is to fail to reject the null hypothesis.

H11₀: There is no significant relationship between Impression Manipulativeness and principal openness.

H11₁: There is a significant relationship between Impression Manipulativeness and principal openness.

The relationship between Impression Manipulativeness and principal openness was found to be $r = -0.156, p = 0.212$. There is no statistically significant relationship between these two variables. The conclusion is to fail to reject the null hypothesis.

H12₀: There is no significant relationship between Impression Manipulativeness and teacher openness.

H12₁: There is a significant relationship between Impression Manipulativeness and teacher openness.

The relationship between Impression Manipulativeness and teacher openness was found to be $r = -0.055, p = 0.658$. There is no statistically significant relationship between these two variables. The conclusion is to fail to reject the null hypothesis.

Table 12

Pearson's Correlation: Principal Openness vs. Communication Style Facets

Communication Style Facet	<i>r</i> -value
Expressiveness	0.239
Preciseness	0.204
Verbal Aggressiveness	-0.485***
Questioningness	-0.088
Emotionality	-0.25*
Impression Manipulativeness	-0.156

*Note: * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$*

Table 13

Pearson's Correlation: Teacher Openness vs. Communication Style Facets

Communication Style Facet	<i>r</i> -value
Expressiveness	0.116
Preciseness	0.242
Verbal Aggressiveness	-0.337**
Questioningness	-0.041
Emotionality	-0.061
Impression Manipulativeness	-0.055

*Note: * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$*

Each of this study's hypotheses is summarized in Table 14.

Table 14

Pearson's Correlation: Hypothesis Summary

Hypothesis	Result	<i>p</i> -value	<i>r</i> -value	Summary
H1 ₀ : There is no significant relationship between Expressiveness and principal openness. H1 ₁ : There is a significant relationship between Expressiveness and principal openness.	Fail to Reject Null	0.053	0.239	There is no statistically significant relationship.
H2 ₀ : There is no significant relationship between Expressiveness and teacher openness. H2 ₁ : There is a significant relationship between Expressiveness and teacher openness.	Fail to Reject Null	0.355	0.116	There is no statistically significant relationship.
H3 ₀ : There is no significant relationship between Preciseness and principal openness. H3 ₁ : There is a significant relationship between Preciseness and principal openness.	Fail to Reject Null	0.100	0.204	There is no statistically significant relationship.
H4 ₀ : There is no significant relationship between Preciseness and teacher openness. H4 ₁ : There is a significant relationship between Preciseness and teacher openness.	Fail to Reject Null	0.050	0.242	There is no statistically significant relationship.
H5₀: There is no significant relationship between Verbal Aggressiveness and principal openness. H5₁: There is a significant relationship between Verbal Aggressiveness and principal openness.	Reject Null	0.000	-0.485	There is a statistically significant relationship.

H6₀: There is no significant relationship between Verbal Aggressiveness and teacher openness. H6₁: There is a significant relationship between Verbal Aggressiveness and teacher openness.	Reject Null	0.006	-0.337	There is a statistically significant relationship.
H7 ₀ : There is no significant relationship between Questioningness and principal openness. H7 ₁ : There is a significant relationship between Questioningness and principal openness.	Fail to Reject Null	0.481	-0.088	There is no statistically significant relationship.
H8 ₀ : There is no significant relationship between Questioningness and teacher openness. H8 ₁ : There is a significant relationship between Questioningness and teacher openness.	Fail to Reject Null	0.745	-0.041	There is no statistically significant relationship.
H9₀: There is no significant relationship between Emotionality and principal openness. H9₁: There is a significant relationship between Emotionality and principal openness.	Reject Null	0.043	-0.250	There is a statistically significant relationship.
H10 ₀ : There is no significant relationship between Emotionality and teacher openness. H10 ₁ : There is a significant relationship between Emotionality and teacher openness.	Fail to Reject Null	0.626	-0.061	There is no statistically significant relationship.
H11 ₀ : There is no significant relationship between Impression Manipulativeness and principal openness. H11 ₁ : There is a significant relationship between Impression Manipulativeness and principal openness.	Fail to Reject Null	0.212	-0.156	There is no statistically significant relationship.
H12 ₀ : There is no significant relationship between Impression Manipulativeness and teacher openness. H12 ₁ : There is a significant relationship between Impression Manipulativeness and teacher openness.	Fail to Reject Null	0.658	-0.055	There is no statistically significant relationship.

Note: Hypotheses with $p < 0.05$ are in boldface.

Multiple Regression Analysis

In addition to the calculation of Pearson's Correlation Coefficient, a multiple linear regression was calculated to predict principal openness based on each of the six communication style facets (Expressiveness, Preciseness, Verbal Aggressiveness, Questioningness, Emotionality, and Impression Manipulativeness). A significant regression equation was found $F(6,65) = 3.96, p < 0.002$, with an R^2 of 0.2873. Perceived principal communication style contributed to 28.73% of the variance in the principal openness index. As shown in Table 15, Verbal Aggressiveness was found to be a significant predictor of principal openness, contributing 14.57% of the variance.

Table 15

Multiple Regression: Analysis of Variance for Principal Openness

Source	DF	Seq SS	Contri- bution	Adj SS	Adj MS	F- Value	P- Value
Regression	6	4.16E+16	28.73%	4.16E+16	6.94E+15	3.96	0.002
Expressiveness ^T	1	8.26E+15	5.70%	5.31E+15	5.31E+15	3.03	0.087
Preciseness ^T	1	1.16E+16	7.99%	1.42E+12	1.42E+12	0	0.977
Verbal Aggressive...^T	1	2.11E+16	14.57%	1.60E+16	1.60E+16	9.13	0.004
Questioning... ^T	1	4.21E+14	0.29%	6.04E+14	6.04E+14	0.35	0.559
Emotionality ^T	1	1.04E+14	0.07%	1.10E+14	1.10E+14	0.06	0.803
Impression Manipulative... ^T	1	1.43E+14	0.10%	1.43E+14	1.43E+14	0.08	0.776
Error	59	1.03E+17	71.27%	1.03E+17	1.75E+15		
Total	65	1.45E+17	100%				

Note: ^T = variable was transformed, Variables with $p < 0.05$ are in boldface.

A multiple linear regression was also calculated to predict teacher openness based on each of the communication style facets (Expressiveness, Preciseness, Verbal Aggressiveness, Questioningness, Emotionality, and Impression Manipulativeness). A significant regression equation was found $F(6,65) = 2.77, p = 0.019$, with an R^2 of 0.2197. Perceived principal communication style contributed to 21.97% of the variance in the teacher openness index. As shown in 's, Verbal Aggressiveness and Emotionality were found to be two significant predictors of teacher openness, contributing 3.72% and 6.39% of the variance, respectively.

Table 16

Multiple Regression: Analysis of Variance for Teacher Openness

Source	DF	Seq SS	Contri- bution	Adj SS	Adj MS	F- Value	P- Value
Regression	6	4.72E+16	21.97%	4.72E+16	7.87E+15	2.77	0.019
Expressiveness ^T	1	2.87E+15	1.34%	2.21E+15	2.21E+15	0.78	0.381
Preciseness ^T	1	1.76E+16	8.18%	1.10E+16	1.10E+16	3.86	0.054
Verbal Aggressive...^T	1	7.99E+15	3.72%	1.79E+16	1.79E+16	6.3	0.015
Questioning... ^T	1	3.99E+13	0.02%	4.23E+15	4.23E+15	1.49	0.227
Emotionality^T	1	1.37E+16	6.39%	1.41E+16	1.41E+16	4.96	0.03
Impression Manipulative... ^T	1	5.00E+15	2.33%	5.00E+15	5.00E+15	1.76	0.19
Error	59	1.68E+17	78.03%	1.68E+17	2.84E+15		
Total	65	2.15E+17	100%				

Note: ^T = variable was transformed, Variables with $p < 0.05$ are in boldface.

Summary of Results

Results of Pearson's Product-Moment Correlation Coefficient indicate a statistically significant negative relationship between Verbal Aggressiveness and principal openness (moderate relationship) and a statistically negative relationship between Verbal Aggressiveness and teacher openness (moderate relationship). Also indicated was a statistically significant negative relationship between Emotionality and teacher openness (low relationship). Results of a multiple regression indicate communication style contributes 28.73% of the variance in principal openness with Verbal Aggressiveness as the only significant predictor of principal openness. Also indicated through a multiple regression is that communication style contributes 21.97% of the variance in teacher openness. Verbal Aggressiveness and Emotionality were the only two significant predictors of teacher openness.

Chapter Five: Discussion, Implications, and Recommendations

This chapter presents a summary of the study as well as conclusions of important findings from the data presented in Chapter Four. The discussion of major findings includes implications for practice. The chapter ends with recommendations for further research.

Overview of Study

Much of the current educational leadership research has focused on leveraging positive school climate to impact or achieve desirable school outcomes (i.e., student achievement, graduation rates, etc.). However, there was a gap in the literature regarding empirically measured principal behaviors that may have related to creating and sustaining positive school climate (Rafferty, 2003). The purpose of this study was to see if a statistically significant relationship existed between principal communication style and school climate as perceived by elementary teachers in high achieving Title 1 schools in a Midwest state.

This study examined six research questions relevant to principal communication style and school climate as perceived by teachers.

RQ 1. What relationship, if any, exists between Expressiveness and school climate?

RQ 2. What relationship, if any, exists between Preciseness and school climate?

RQ 3. What relationship, if any, exists between Verbal Aggressiveness and school climate?

RQ 4. What relationship, if any, exists between Questioningness and school climate?

RQ 5. What relationship, if any, exists between Emotionality and school climate?

RQ 6. What relationship, if any, exists between Impression Manipulativeness and school climate?

A quantitative survey method was utilized. The sample in this study was determined based on purposive sampling of elementary schools that received Title 1 funds during the 2015-16 school year. Of the Minnesota elementary schools receiving Title 1 funding, the top performing 15% are honored as Reward Schools by the Minnesota Department of Education. Reward Schools are identified based on a multiple measures ratings of student data relating to proficiency, growth, achievement gap reduction, and graduation rates. Of the 119 total Reward Schools in 2015-16, responses from three metropolitan schools and three rural schools were included in this study. A total of 66 responses were included in this study, out of a possible 188 responses from all licensed teachers in the six schools, which represented an overall response rate of 35.1%.

The survey included two instruments. The first instrument was the Communication Style Inventory (CSI), which consisted of a six-dimensional model. The CSI measured communication style scores in the areas of Expressiveness, Preciseness, Verbal Aggressiveness, Questioningness, Emotionality, and Impression Manipulativeness. The second instrument was the Organizational Climate Description Questionnaire – Revised Elementary (OCDQ-RE) and consisted of six

dimensions of school climate (three dimensions representing principal openness and three dimensions representing teacher openness). The openness scores combined to identify one of four types of school climate that were perceived to exist (i.e., open climate, engaged climate, disengaged climate, and closed climate). Of the four climate types, the most desirable was an open climate (Hoy & Tarter, 1997).

Major Findings

The major findings in this study help to inform practicing and aspiring principals as well as principal preparation programs regarding the relationship of principal communication with school climate. Findings are valuable to principals and other school leaders as they communicate to continually transfer knowledge, ideas, opinions and feelings in an era of increased accountability. “The adequate measurement of the main communication styles may be considered crucial because of the practical relevance of communication styles in all kinds of settings...” (De Vries et al., 2013, p. 507). The researcher has identified five major findings as a result of this study.

1. Verbal Aggressiveness has a statistically significant relationship ($p = 0.0$) and a moderate negative association ($r = -0.485$) with principal openness.
2. Emotionality has a statistically significant relationship ($p = .043$) and a low negative association ($r = -0.25$) with principal openness.
3. Communication style contributed to 28.73% of the variance in principal openness with Verbal Aggressiveness as the only significant predictor of principal openness.

4. Verbal Aggressiveness has a statistically significant relationship ($p = 0.006$) and a moderate negative association ($r = -0.337$) with teacher openness.
5. Communication style contributed to 21.97% of the variance in teacher openness with Verbal Aggressiveness and Emotionality as the only significant predictors of teacher openness.

Principal Openness

Principal openness is measured along a continuum using three dimensions or subtests, which include: supportive principal behavior, directive principal behavior, and restrictive principal behavior. Principals who exhibit supportive principal behaviors are described as using constructive criticism in a positive way and complimenting teachers. Supportive principals listen to and accept suggestions from teachers. Principals who score high in directive principal behaviors monitor everything teachers do, they rule with an iron fist, and check lesson plans of teachers. Principals scoring high in restrictive principal behaviors burden teachers with busywork, allow routine tasks to interfere with the job of teaching, and expect too many additional requirements of teachers (e.g., committee involvement). In order to have a high rating of overall principal openness, scores were high in supportive principal behaviors and low in both directive and restrictive principal behaviors. Ratings in the areas of supportive principal behaviors, directive principal behaviors, and restrictive principal behaviors were combined to represent the overall principal openness index.

Verbal aggressiveness and principal openness.

Teacher perceptions of Verbal Aggressiveness were found to have a statistically significant negative relationship with principal openness. As perceptions of Verbal Aggressiveness increased, perceptions of principal openness decreased. Principals high in Verbal Aggressiveness ratings were perceived to exhibit high levels of anger, authoritarianism, derogatoriness, and nonsupportiveness. Verbally aggressive principals exploded in anger when displeased, reacted irritably, humiliated others, and did not listen well.

Emotionality and principal openness.

Similar to Verbal Aggressiveness, teacher perceptions of Emotionality were found to have a statistically significant, negative relationship with principal openness. As perceptions of Emotionality of the principal increased, perceptions of principal openness decreased. Principals perceived high in Emotionality exhibited high levels of sentimentality, worrisomeness, tension, and defensiveness. Highly emotional principals were easily overcome by emotions, talked often of their concerns, were visibly tense, and were unable to cope easily with criticism.

Predictors of principal openness.

In addition to Pearson's correlation, a multiple regression analysis was also utilized. When a multiple regression was calculated, communication style contributed 28.73% of the variance in principal openness. Of the six communication styles, Verbal Aggressiveness was the only significant predictor of principal openness. If a principal was perceived to display a high verbally aggressive communication style, one could predict that the perceived level of principal openness decreased.

Upon review of this study's results and acknowledgement of the significant negative associations that Verbal Aggressiveness and Emotionality shared with principal openness, principals must be keenly aware of how their communication efforts are perceived. In addition, analyses of this study's responses shows that over 28% of the variance in the dependent variable of principal openness was due to how teachers perceived their principal's communication style. It is clear that communication effectiveness does play a vital role in principal openness and thus school climate. The degree to which teachers perceive a principal's verbal aggression significantly predicts the degree of perceived principal openness in the school.

These results inform practicing as well as aspiring principals of the significant relationship that is perceived between communication style and principal openness. In this age of increased accountability in schools, teachers must know that the principal listens to them, that genuine praise will be given to them, and that the competency of the faculty is respected (Hoy, Tarter & Kottkamp, 1991). The principal-teacher relationship is crucial to the ongoing work of continuous improvement in our schools (Hoy & Tarter, 1997).

Principals must be aware of the characteristics of all communication styles, but specifically of those that have statistically significant relationships with principal openness (i.e., Verbal Aggressiveness and Emotionality). Appendix F lists the survey items of the CSI, organized by each of the communication styles. Principals should be familiar with the traits of these six communication styles, regularly self-assess how they think their communications are being received by teachers, and invite feedback from others about their communication style. By raising awareness and inviting

constructive feedback, principals will be able to leverage their communication style as a medium for influencing principal openness that is perceived by teachers.

Teacher Openness

In addition to principal openness, teacher openness was the other component that comprised overall school climate. Teacher openness was measured along a continuum using three dimensions or subtests, which include: collegial teacher behavior, intimate teacher behavior, and disengaged teacher behavior. Collegial teacher behaviors were described as teachers helping and supporting each other, teachers respecting each other professionally, and teachers completing their work with exuberance. Intimate teacher behaviors included teachers socializing with each other, teachers forming friendships among staff members, and teachers throwing parties for each other. The third dimension of teacher openness was disengaged teacher behavior. Teachers viewing faculty meetings as useless, a minority of teacher always opposing the majority, and teachers rambling at faculty meetings were descriptions of disengaged teacher behaviors. In order to have a high rating of overall teacher openness, scores were high in both collegial and intimate teacher behaviors and were low in disengaged teacher behaviors. Ratings in the areas of collegial teacher behaviors, intimate teacher behaviors, and disengaged teacher behaviors were combined to represent the overall teacher openness index.

Preciseness and teacher openness.

For matters of this study, a significance level of less than 0.05 was established. Perceptions of one variable, Preciseness, were found to be nearly statistically significant ($p = 0.050$) with a low positive relationship ($r = 0.242$) with

teacher openness. As perceptions of Preciseness increased, perceptions of teacher openness increased as well.

Principals high in Preciseness ratings were perceived to exhibit high levels of structuredness, thoughtfulness, substantiveness, and conciseness. Precise principals always expressed a clear chain of thoughts, chose their words with care, involved important topics in their conversations, and used few words to explain something. Although the variable of Preciseness did not technically meet the significance level for purposes of this study, the relationship was nearly statistically significant and thus, useful to point out in the final discussion.

Verbal aggressiveness and teacher openness.

Perceptions of Verbal Aggressiveness were found to have a statistically significant negative relationship with teacher openness. As perceptions of Verbal Aggressiveness of the principal increased, perceptions of teacher openness decreased.

Similar to the discussion regarding Verbal Aggressiveness and principal openness, principals rated high in Verbal Aggressiveness are perceived to exhibit high levels of anger, authoritarianism, derogatoriness, and nonsupportiveness. Verbally aggressive principals explode in anger when displeased, react irritably, humiliate others, and do not listen well.

Predictors of teacher openness.

In addition to Pearson's correlation, a multiple regression analysis was also utilized. When a multiple regression was calculated, principal communication style contributed 21.97% of the variance in teacher openness. Of the six communication styles, Verbal Aggressiveness was the only significant predictor of teacher openness.

If a principal was perceived to display a high verbally aggressive communication style, one could predict that the perceived level of teacher openness would decrease.

Upon review of this study's results and acknowledgement of the significant negative association that Verbal Aggressiveness shares with teacher openness, principals must be aware of how their communication efforts are perceived. In addition, analyses of this study's responses shows that over 21% of the variance in the dependent variable of teacher openness was due to how teachers perceived their principal's communication style. It is clear that communication effectiveness does play a vital role in teacher openness and thus school climate. The degree to which teachers perceive a principal's verbal aggression significantly predicts the degree of perceived teacher openness in the school.

The results regarding teacher openness inform practicing and aspiring principals as well. Teaching is a challenging job. To support this work, teachers deserve to have pride in their school, engage in mutually respectful partnership with their colleagues, and access strong social supports through each other (Hoy, Tarter, and Kottkamp, 1991). Like the importance of the principal-teacher relationship, the teacher-teacher relationship is imperative to the success of schools today (Hoy, Tarter, 1997).

Awareness of the characteristics of all communication styles, but specifically of those that have statistically significant relationships with teacher openness (i.e., Verbal Aggressiveness) is important to principals. Appendix F lists the survey items of the CSI, organized by each of the communication styles. Principals should increase their familiarity of the characteristics of these six communication styles,

regularly self-assess how they think their communications are impacting teacher relationships, and invite feedback from school staff about their perceived communication style. By raising awareness and inviting constructive feedback, principals will be able to use communication style to influence higher levels of teacher openness within their schools.

The results of this study can impact current and aspiring principal practice. These results can also inform principal preparation programs. Colleges and universities may find great insight by examining these results. The relationships unveiled in this study could impact the necessary skills needed by principals. Literature states the importance of the effective communication in schools (Ibrahim & Mahmoud, 2016; National Policy for Educational Administration, 2015); however, little empirical research investigated the communication styles of principals and the relationship of those styles with school climate (Rafferty, 2003). As principal preparation programs acknowledge the imperative role of communication in leadership, then specific coursework and assessment practices would be embedded within their programs to prepare principals as intentional and reflective communicators. The evidence of such would be found in the perceptions of school climate.

Recommendations

Although the sample size was quite small in this study ($n = 66$), and the findings are difficult to generalize, the results are worthwhile nonetheless. Until this time, no known research investigated the relationship between principal communication style as an independent variable and school climate as the dependent

variable. From this starting point, future research can emerge to continue to investigate relationships between principal communication styles, as well as other independent variables, and school climate as a dependent variable. Results of this nature inform practicing and aspiring principals, principal preparation programs, and add to the emerging literature in the areas of communication research and school climate research.

Recommendations for future research are many. One recommendation is to investigate ways of increasing the sample size within a similar study. Although this study's response rate was 35.1%, an even higher response rate would provide a clearer picture of the perceptions that exist at each school. Additionally, by increasing the population size, while also increasing the sample size, a more robust data set could be analyzed.

Another recommendation for future research is to investigate other categories of schools. This study was limited the study through purposive sampling to high achieving Title 1 public elementary schools. Other categories of schools may include non-high achieving schools, other school levels such as middle or high school, as well as private or charter schools. By researching other categories of schools, the research base would grow, thereby allowing a deeper investigation into trends, correlations, and other relationships between variables.

A third recommendation for future research is to consider demographic information of both the school's principal as well as the teachers. By having principals identify information about himself or herself such as gender, number of years as a principal, or number of years at the given school, trends and relationships

involving demographic data could be investigated. Perceived communication style and perceived school climate could be impacted by additional demographic factors that could be explored in future research.

A fourth recommendation is to investigate a comprehensive view of school climate. This study limited perceptions of school climate to only those of teachers. Current school climate research identifies that the most accurate school climate ratings are comprehensive and based on perceptions from a variety of stakeholders such as teachers, administrators, students, and parents (Hoy, Tater, & Kottkamp, 1991). To explore perceptions of school climate to stakeholders beyond that of teachers, additional insight could be found.

A final recommendation for future research is to look more closely at Preciseness in relationship to the openness indices. This study used a significance level of $p < 0.05$. Results indicated that a statistically significant relationship did not exist as $p = 0.05$. A closer look at the specific independent variable of Preciseness could reveal additional insights into communication style and school climate relationships.

This study investigated the relationship between perceived principal communication style and school climate from the perspective of teachers in high achieving Title 1 public elementary schools in a Midwest state. Findings indicate a significant negative relationship between Verbal Aggressiveness and both openness indices of school climate as well as a significant negative relationship between Emotionality and principal openness. This informs practicing and aspiring principals as well as principal preparation programs.

As research in the fields of communication style and school climate continues to grow and deepen, educators have greater knowledge upon which to base their practice. The results of this study contribute to communication style research and school climate research by investigating significant relationships between their variables. Furthermore, these results contribute to the groundwork of what comprises an effective school and stands upon the shoulders of those already engaged in this vital work (Deming, 1994; Mayfield & Garrison-Wade, 2015; Suber, 2011).

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Appendix A

Email of Introduction

Dear Educator,

My name is Ryan Lang and I am a doctoral candidate at Bethel University (St. Paul, MN) and my degree will be in the field of Educational Administration, K-12. My desire is to gather teachers' perceptions regarding their principal's communication style and school climate. This is in order to investigate the extent of the relationship that exists, if any, between them. My study is entitled *Through the Eyes of Teachers: Relationships Between Principal Communication Style and School Climate*. By learning more from teachers about their perceptions of principal communication and school climate, it is my hope that these can be leveraged towards continuous improvement in our schools.

The field of education values your contribution to this study. Participation includes the completion of two surveys. Responses to one survey share your perceptions of your principal's communication style and responses to a second survey share your perceptions of your school's climate. Your responses are completely anonymous and your confidentiality will be maintained throughout this study. Be assured that no individual school or teacher responses will be disclosed. There are no anticipated risks to you for your participation. It is estimated that participation in both surveys will take about 20-25 minutes.

If you have any questions regarding this study, please contact me at r-lang@bethel.edu. The surveys will be closed on _____, 2016.

Thank you for your work each day in the classroom and for your consideration to participate in this valuable study.

Sincerely,



Ryan Lang
Bethel University Doctoral Candidate
r-lang@bethel.edu

Click [HERE](#) to take the surveys.

Appendix B

Follow Up Email

Dear Educator,

Hello again! Approximately two weeks ago, an opportunity was presented to you, which requested your perceptions of principal communication style and school climate. The opportunity to share your perceptions is still open.

Your responses are completely anonymous and your confidentiality will be maintained throughout this study. Be assured that no individual school or teacher responses will be disclosed. There are no anticipated risks to you for your participation. It is estimated that participation in both surveys will take about 20-25 minutes.

If you have any questions regarding this study, please contact me at r-lang@bethel.edu. The surveys will be closed on _____, 2016.

Thank you for your work each day in the classroom and for your consideration to participate in this valuable study.

Sincerely,



Ryan Lang
Bethel University Doctoral Candidate
r-lang@bethel.edu

Click [HERE](#) to take the surveys.

Appendix C

**Organizational Climate Description Questionnaire - Revised Elementary
(OCDQ-RE)**

Directions: The following are statements about your school. Please indicate the extent to which each statement characterizes your school.

Responses:

RO = Rarely Occurs, SO = Sometimes Occurs, O = Often Occurs, VFO = Very Often Occurs

1. The teachers accomplish their work with vim, vigor, and pleasure. RO SO O VFO
2. Teachers' closest friends are other faculty members at this school. RO SO O VFO
3. Faculty meetings are useless. RO SO O VFO
4. The principal goes out of his/her way to help teachers. RO SO O VFO
5. The principal rules with an iron fist. RO SO O VFO
6. Teachers leave school immediately after school is over. RO SO O VFO
7. Teachers invite faculty members to visit them at home. RO SO O VFO
8. There is a minority group of teachers who always oppose the majority. RO SO O VFO
9. The principal uses constructive criticism. RO SO O VFO
10. The principal checks the sign-in sheet every morning. RO SO O VFO
11. Routine duties interfere with the job of teaching. RO SO O VFO
12. Most of the teachers here accept the faults of their colleagues. RO SO O VFO
13. Teachers know the family background of other faculty members. RO SO O VFO
14. Teachers exert group pressure on non-conforming faculty members. RO SO O VFO
15. The principal explains his/her reasons for criticism to teachers. RO SO O VFO
16. The principal listens to and accepts teachers' suggestions. RO SO O VFO
17. The principal schedules the work for the teachers. RO SO O VFO
18. Teachers have too many committee requirements. RO SO O VFO
19. Teachers help and support each other. RO SO O VFO
20. Teachers have fun socializing together during school time. RO SO O VFO
21. Teachers ramble when they talk at faculty meetings. RO SO O VFO
22. The principal looks out for the personal welfare of teachers. RO SO O VFO
23. The principal treats teachers as equals. RO SO O VFO
24. The principal corrects teachers' mistakes. RO SO O VFO
25. Administrative paperwork is burdensome at this school. RO SO O VFO
26. Teachers are proud of their school. RO SO O VFO
27. Teachers have parties for each other. RO SO O VFO

- | | |
|---|-------------|
| 28. The principal compliments teachers. | RO SO O VFO |
| 29. The principal is easy to understand. | RO SO O VFO |
| 30. The principal closely checks classroom (teacher) activities. | RO SO O VFO |
| 31. Clerical support reduces teachers' paperwork. | RO SO O VFO |
| 32. New teachers are readily accepted by colleagues. | RO SO O VFO |
| 33. Teachers socialize with each other on a regular basis. | RO SO O VFO |
| 34. The principal supervises teachers closely. | RO SO O VFO |
| 35. The principal checks lesson plans. | RO SO O VFO |
| 36. Teachers are burdened with busy work. | RO SO O VFO |
| 37. Teachers socialize in small, select groups. | RO SO O VFO |
| 38. Teachers provide strong social support for colleagues. | RO SO O VFO |
| 39. The principal is autocratic. | RO SO O VFO |
| 40. Teachers respect the professional competence of their colleagues. | RO SO O VFO |
| 41. The principal monitors everything teachers do. | RO SO O VFO |
| 42. The principal goes out of his/her way to show appreciation to teachers. | RO SO O VFO |

Appendix D

Organizational Climate Description Questionnaire - Revised Elementary (OCDQ-RE) Items by Dimension

Principal Behaviors

Supportive Principal Behavior items

4. The principal goes out of his/her way to help teacher.
9. The principal uses constructive criticism.
15. The principal explains his/her reasons for criticism to teachers.
16. The principal listens to and accepts teachers' suggestions.
22. The principal looks out for the personal welfare of teachers.
23. The principal treats teachers as equals.
28. The principal compliments teachers.
29. The principal is easy to understand.
42. The principal goes out of his/her way to show appreciation to teachers.

Directive Principal Behavior items

5. The principal rules with an iron fist.
10. The principal checks the sign-in sheet every morning.
17. The principal schedules the work for the teachers.
24. The principal corrects teachers' mistakes.
30. The principal closely checks classroom (teacher) activities.
34. The principal supervises teachers closely.
35. The principal checks lesson plans.
39. The principal is autocratic.
41. The principal monitors everything teachers do.

Restrictive Principal Behavior items

11. Routine duties interfere with the job of teaching.
18. Teachers have too many committee requirements.
25. Administrative paperwork is burdensome at this school.
31. Clerical work reduces teachers' paperwork.*
36. Teachers are burdened with busywork.

Teacher Behaviors

Collegial Teacher Behavior items

1. The teachers accomplish their work with vim, vigor, and pleasure.
6. Teachers leave school immediately after school is over.*
12. Most of the teachers here accept the faults of their colleagues.
19. Teachers help and support each other.
26. Teachers are proud of their school.
32. New teachers are readily accepted by their colleagues.

- 37. Teachers socialize together in small, select groups.*
- 40. Teachers respect the professional competence of their colleagues.

Intimate Teacher Behavior items

- 2. Teachers' closest friends are other faculty members at this school.
- 7. Teachers invite faculty members to visit them at home.
- 13. Teachers know the family background of other faculty members.
- 20. Teachers have fun socializing together during school time.
- 27. Teachers have parties for each other.
- 33. Teachers socialize with each other on a regular basis.
- 38. Teachers provide strong social support for colleagues.

Disengaged Teacher Behavior items

- 3. Faculty meetings are useless.
- 8. There is a minority group of teachers who always oppose the majority.
- 14. Teachers exert group pressure on non-conforming members.
- 21. Teachers ramble when they talk at faculty meetings.

*Note: * are reverse scored items*

Appendix E

Communication Styles Inventory (CSI)

Directions: The following are statements about your principal's communication style. Please indicate the extent to which each statement characterizes your principal's communication style.

Responses:

CD = Completely Disagree, D = Disagree, N = Neutral, A = Agree, CA = Completely Agree

NOTE: Pronouns have been changed in the survey items to be appropriate for this study.

1. My principal always has a lot to say. CD D N A CA
2. When my principal tells a story, the different parts are always clearly related to each other. CD D N A CA
3. If something displeases my principal, he/she sometimes explodes with anger. CD D N A CA
4. My principal sometimes tosses bizarre ideas into a group discussion. CD D N A CA
5. When my principal sees others cry, he/she has difficulty holding back his/her tears. CD D N A CA
6. My principal sometimes praises somebody at great length, without being really genuine, in order to make them like him/her. CD D N A CA
7. My principal often takes the lead in a conversation. CD D N A CA
8. My principal thinks carefully before he/she says something. CD D N A CA
9. My principal is not very likely to tell someone what they should do. CD D N A CA
10. My principal never enters into discussions about the future of the human race. CD D N A CA
11. When my principal is worried about something, he/she finds it hard to talk about anything else. CD D N A CA
12. My principal sometimes uses charm to get something done. CD D N A CA
13. Because of my principal's humor, he/she is often the center of attention among a group of people. CD D N A CA
14. Conversations with my principal always involve some important topic. CD D N A CA
15. My principal never makes fun of anyone in a way that might hurt their feelings. CD D N A CA
16. During a conversation, my principal always tries to find out about the background of somebody's opinion. CD D N A CA
17. Because of stress, my principal is sometimes unable to express him/herself properly. CD D N A CA

18. My principal makes sure that people cannot read it from his/her face when my principal doesn't appreciate them. CD D N A CA
19. My principal communicates with others in a distant manner. CD D N A CA
20. My principal doesn't need a lot of words to get his/her message across. CD D N A CA
21. My principal can listen well. CD D N A CA
22. To stimulate discussion, my principal sometimes expresses a view different from that of his/her conversation partner. CD D N A CA
23. The comments of others have a noticeable effect on my principal. CD D N A CA
24. My principal sometimes conceals information to make him/her look better. CD D N A CA
25. My principal has a hard time keeping him/herself silent when around other people. CD D N A CA
26. My principal sometimes finds it hard to tell a story in an organized way. CD D N A CA
27. Even when my principal is angry, he/she won't take it out on someone else. CD D N A CA
28. My principal often says unexpected things. CD D N A CA
29. During a conversation, my principal is not easily overcome by emotions. CD D N A CA
30. In discussions my principal sometimes expresses an opinion he/she did not support in order to make a good impression. CD D N A CA
31. Most of the time, other people determine what the discussion is about, not my principal. CD D N A CA
32. My principal weighs his/her answers carefully. CD D N A CA
33. My principal sometimes insists that others do what he/she says. CD D N A CA
34. My principal likes to talk to others about the deeper aspects of our existence. CD D N A CA
35. My principal tends to talk about his/her concerns a lot. CD D N A CA
36. My principal sometimes flirts a little bit to win somebody over. CD D N A CA
37. My principal has a hard time being humorous in a group. CD D N A CA
38. You won't hear my principal jabbering about superficial or shallow matters. CD D N A CA
39. My principal at times makes people look like fools. CD D N A CA
40. My principal doesn't bother asking a lot of questions just to find out why people feel the way they do about something. CD D N A CA
41. My principal can be visibly tense during a conversation. CD D N A CA
42. Even when people ask for my principal's thoughts on something, he/she seldom speaks his/her mind if those thoughts are uncomfortable for others. CD D N A CA
43. My principal behaves somewhat formally when he/she meets someone. CD D N A CA

44. Most of the time, my principal only needs a few words to explain something. CD D N A CA
45. My principal always shows a lot of understanding for other people's problems. CD D N A CA
46. My principal likes to provoke others by making bold statements. CD D N A CA
47. Nasty remarks from other people do not bother my principal much. CD D N A CA
48. My principal sometimes "forgets" to tell something when this is more convenient for him/her. CD D N A CA
49. My principal is never the one who breaks a silence by starting to talk. CD D N A CA
50. My principal always expresses a clear chain of thoughts when he/she argues a point. CD D N A CA
51. My principal tends to snap at people when he/she gets annoyed. CD D N A CA
52. In discussions, my principal often puts forward unusual points of view. CD D N A CA
53. When describing his/her memories, my principal sometimes gets visibly emotional. CD D N A CA
54. Sometimes my principal uses flattery to get someone in a favorable mood. CD D N A CA
55. My principal often determines which topics are talked about during a conversation. CD D N A CA
56. The statements my principal makes are not always well thought out. CD D N A CA
57. My principal expects people to obey when he/she asks them to do something. CD D N A CA
58. My principal never engages in so-called philosophical conversations. CD D N A CA
59. People can tell when my principal feels anxious. CD D N A CA
60. My principal would not use his/her appearance to make people do things. CD D N A CA
61. My principal's jokes always draw a lot of attention. CD D N A CA
62. My principal is someone who can often talk about trivial things. CD D N A CA
63. My principal has been known to be able to laugh at people in their face. CD D N A CA
64. My principal asks a lot of questions to uncover someone's motives. CD D N A CA
65. My principal is able to address a large group of people very calmly. CD D N A CA
66. My principal is able to hide negative feelings about other people well. CD D N A CA
67. My principal addresses others in a very casual way. CD D N A CA

68. My principal is somewhat long-winded when he/she needs to explain something. CD D N A CA
69. My principal always takes time for someone if they want to talk to him/her. CD D N A CA
70. My principal tries to find out what people think about a topic by getting them to debate with him/her about it. CD D N A CA
71. When people criticize my principal, he/she is visibly hurt. CD D N A CA
72. My principal tells people the whole story, even when this is probably not good for him/her. CD D N A CA
73. My principal likes to talk a lot. CD D N A CA
74. My principal's stories always contain a logical structure. CD D N A CA
75. My principal can sometimes react somewhat irritably to people. CD D N A CA
76. In conversations, my principal often toys with some very wild ideas. CD D N A CA
77. People can tell that my principal is emotionally touched by some topics of conversation. CD D N A CA
78. To be considered likeable, my principal sometimes says things his/her conversation partner likes to hear. CD D N A CA
79. My principal often determines the direction of the conversations. CD D N A CA
80. My principal chooses his/her words with care. CD D N A CA
81. When my principal feels others should do something for him/her, my principal asks for it in a demanding tone of voice. CD D N A CA
82. My principal regularly has discussions with people about the meaning of life. CD D N A CA
83. When my principal worries, everybody notices. CD D N A CA
84. My principal sometimes puts on a very seductive voice when he/she wants something. CD D N A CA
85. My principal often manages to make others burst out laughing. CD D N A CA
86. My principal rarely, if ever, just chatters away about something. CD D N A CA
87. My principal has humiliated someone in front of a crowd. CD D N A CA
88. My principal always asks how people arrive at their conclusions. CD D N A CA
89. My principal finds it hard to talk in a relaxed manner when what he/she has to say is valued highly. CD D N A CA
90. Other people can easily tell when my principal thinks badly about them. CD D N A CA
91. My principal comes across as somewhat stiff when dealing with people. CD D N A CA
92. With a few words my principal can usually clarify his/her point to everybody. CD D N A CA
93. My principal always treats people with a lot of respect. CD D N A CA

94. By making controversial statements, my principal often forces people to express a clear opinion. CD D N A CA
95. My principal is not always able to cope easily with critical remarks. CD D N A CA
96. Even if my principal would benefit from withholding information from someone, he/she would find it hard to do so. CD D N A CA

Appendix F

Communication Styles Inventory (CSI) Items by Communication Style

Expressiveness

Talkativeness

1. My principal always has a lot to say.
25. My principal has a hard time keeping him/herself silent when around other people.
49. My principal is never the one who breaks a silence by starting to talk.*
73. My principal likes to talk a lot.

Conversational Dominance

7. My principal often takes the lead in a conversation.
31. Most of the time, other people determine what the discussion is about, not my principal.
55. My principal often determines which topics are talked about during a conversation.
79. My principal often determines the direction of the conversations.

Humor

13. Because of my principal's humor, he/she is often the center of attention among a group of people.
37. My principal has a hard time being humorous in a group.*
61. My principal's jokes always draw a lot of attention.
85. My principal often manages to make others burst out laughing.

Informality

19. My principal communicates with others in a distant manner.*
43. My principal behaves somewhat formally when he/she meets someone.
67. My principal addresses others in a very casual way.
91. My principal comes across as somewhat stiff when dealing with people.

Preciseness

Structuredness

2. When my principal tells a story, the different parts are always clearly related to each other.
26. My principal sometimes finds it hard to tell a story in an organized way.*
50. My principal always expresses a clear chain of thoughts when he/she argues a point.

74. My principal's stories always contain a logical structure.

Thoughtfulness

- 8. My principal thinks carefully before he/she says something.
- 32. My principal weighs his/her answers carefully.
- 56. The statements my principal makes are not always well thought out.*
- 80. My principal chooses his/her words with care.

Substantiveness

- 14. Conversations with my principal always involve some important topic.
- 38. You won't hear my principal jabbering about superficial or shallow matters.
- 62. My principal is someone who can often talk about trivial things.*
- 86. My principal rarely, if ever, just chatters away about something.

Conciseness

- 20. My principal doesn't need a lot of words to get his/her message across.
- 44. Most of the time, my principal only needs a few words to explain something.
- 68. My principal is somewhat long-winded when he/she needs to explain something.*
- 92. With a few words my principal can usually clarify his/her point to everybody.

Verbal Aggressiveness

Angriness

- 3. If something displeases my principal, he/she sometimes explodes with anger.
- 27. Even when my principal is angry, he/she won't take it out on someone else.*
- 51. My principal tends to snap at people when he/she gets annoyed.
- 75. My principal can sometimes react somewhat irritably to people.

Authoritarianism

- 9. My principal is not very likely to tell someone what they should do.*
- 33. My principal sometimes insists that others do what he/she says.
- 57. My principal expects people to obey when he/she asks them to do something.
- 81. When my principal feels others should do something for him/her, my principal asks for it in a demanding tone of voice.

Derogatoriness

15. My principal never makes fun of anyone in a way that might hurt their feelings.*
39. My principal at times makes people look like fools.
63. My principal has been known to be able to laugh at people in their face.
87. My principal has humiliated someone in front of a crowd.

Nonsupportiveness

21. My principal can listen well.*
45. My principal always shows a lot of understanding for other people's problems.*
69. My principal always takes time for someone if they want to talk to him/her.*
93. My principal always treats people with a lot of respect.*

Questioningness

Unconventionality

4. My principal sometimes tosses bizarre ideas into a group discussion.
28. My principal often says unexpected things.
52. In discussions, my principal often puts forward unusual points of view.
76. In conversations, my principal often toys with some very wild ideas.

Philosophicalness

10. My principal never enters into discussions about the future of the human race.*
34. My principal likes to talk to others about the deeper aspects of our existence.
58. My principal never engages in so-called philosophical conversations.*
82. My principal regularly has discussions with people about the meaning of life.

Inquisitiveness

16. During a conversation, my principal always tries to find out about the background of somebody's opinion.
40. My principal doesn't bother asking a lot of questions just to find out why people feel the way they do about something.*
64. My principal asks a lot of questions to uncover someone's motives.
88. My principal always asks how people arrive at their conclusions.

Argumentativeness

- 22. To stimulate discussion, my principal sometimes expresses a view different from that of his/her conversation partner.
- 46. My principal likes to provoke others by making bold statements.
- 70. My principal tries to find out what people think about a topic by getting them to debate with him/her about it.
- 94. By making controversial statements, my principal often forces people to express a clear opinion.

Emotionality

Sentimentality

- 5. When my principal sees others cry, he/she has difficulty holding back his/her tears.
- 29. During a conversation, my principal is not easily overcome by emotions.*
- 53. When describing his/her memories, my principal sometimes gets visibly emotional.
- 77. People can tell that my principal is emotionally touched by some topics of conversation.

Worrisomeness

- 11. When my principal is worried about something, he/she finds it hard to talk about anything else.
- 35. My principal tends to talk about his/her concerns a lot.
- 59. People can tell when my principal feels anxious.
- 83. When my principal worries, everybody notices.

Tension

- 17. Because of stress, my principal is sometimes unable to express him/herself properly.
- 41. My principal can be visibly tense during a conversation.
- 65. My principal is able to address a large group of people very calmly.*
- 89. My principal finds it hard to talk in a relaxed manner when what he/she has to say is valued highly.

Defensiveness

- 23. The comments of others have a noticeable effect on my principal.
- 47. Nasty remarks from other people do not bother my principal much.*
- 71. When people criticize my principal, he/she is visibly hurt.
- 95. My principal is not always able to cope easily with critical remarks.

Impression Manipulativeness

Ingratiation

- 6. My principal sometimes praises somebody at great length, without being really genuine, in order to make them like him/her.
- 30. In discussions my principal sometimes expresses an opinion he/she did not support in order to make a good impression.
- 54. Sometimes my principal uses flattery to get someone in a favorable mood.
- 78. To be considered likeable, my principal sometimes says things his/her conversation partner likes to hear.

Charm

- 12. My principal sometimes uses charm to get something done.
- 36. My principal sometimes flirts a little bit to win somebody over.
- 60. My principal would not use his/her appearance to make people do things.*
- 84. My principal sometimes puts on a very seductive voice when he/she wants something.

Inscrutableness

- 18. My principal makes sure that people cannot read it from his/her face when my principal doesn't appreciate them.
- 42. Even when people ask for my principal's thoughts on something, he/she seldom speaks his/her mind if those thoughts are uncomfortable for others.
- 66. My principal is able to hide negative feels about other people well.
- 90. Other people can easily tell when my principal thinks badly about them.*

Concealingness

- 24. My principal sometimes conceals information to make him/her look better.
- 48. My principal sometimes "forgets" to tell something when this is more convenient for him/her.
- 72. My principal tells people the whole story, even when this is probably not good for him/her.*
- 96. Even if my principal would benefit from withholding information from someone, he/she would find it hard to do so.*

*Note: * are reverse scored items*