

THE PREDICTIVE RELATIONSHIP OF TEACHER LEADERSHIP DIMENSIONS AND
ELEMENTARY SCHOOL CLIMATE

by

Ashley Foland Watson

Liberty University

A Dissertation Presented in Partial Fulfillment

Of the Requirements for the Degree

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APPROVED BY:

Dr. Edward Moore, Ph.D., Committee Chair

Dr. David Duby, Ph.D., Committee Member

Dr. Gayle McLaurin, Ed.D., Committee Member

ABSTRACT

Leaders exist at many levels. Within the educational arena, studies have shown the correlation of leadership styles among principals and the school culture (Pepper & Thomas, 2002; *Perspective*, 2012; Williams, 2009). This study attempted to extend Bass's Transformational Leadership Theory (1985) and Hersey and Blanchard's Situational Leadership Theory (1976) through examining leadership dimensions among teacher team leaders - and their influence on school climate. Using a predictive correlational research design, the current study sought to investigate relationships between leadership dimensions of teacher leaders and elementary school climates. Two different groups of teachers from a school district in the northern metro area in Atlanta participated in two different surveys. Teacher team leaders from ten elementary schools were surveyed using the *Multifactor Leadership Questionnaire* to determine their leadership dimensions, or refined constructs of each leadership style. Subsequently, all other teachers working with the identified team leaders were surveyed using the *Organizational Climate Description for Elementary Schools*. A multiple regression analysis was used and indicated that there is a significant relationship between the two constructs – teacher leadership dimensions and elementary school climate – in the area of Disengaged Teacher Behavior and Teacher Openness Index. There were no significant relationships found between teacher team leaders' leadership dimensions and elementary school climate in the areas of Collegial Teacher Behavior or Intimate Teacher Behavior. Discussion of the results and implications for future research were made.

Keywords: Leadership styles, leadership dimensions, teacher leaders, school climate, Transformational Leadership Theory

Dedication Page

I dedicate this work to my supportive parents, my precious son Max, my fiancé Johnnie, and my loving grandparents – Papaw J., Nana, Mimi, and Poppy. High expectations have been something I have always set for myself, but without the support and “You can do it” coming from Mom and Dad, I’m not so sure I would have pressed on this far in my educational journey. As a child, I wanted to be a doctor, and my Papaw J. always encouraged me to chase my dream and be the first doctor in our immediate family. Since then, he has not eased up, and he has been one of my biggest cheerleaders all along the way – even from the beginning in my Undergraduate studies at North Greenville University. I am proud to have the support and love from Nana, Papaw J, and Mimi, and also Poppy’s quiet encouragement and smiles of support until the day he passed away.

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Lord for strength when mine fails. I am so thankful to have met this milestone that seemed so far away and nearly impossible just ten years ago when I was graduating college. More than that, I am thankful to be able to share this memory and so many others with you both! Mom, this moment definitely COUNTS, and Daddy, I will always be “Your Little Princess.” I love you both!

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List of Abbreviations

American Association of University Professors (AAUP)

Every Student Succeeds Act (ESSA)

Multifactor Leadership Questionnaire (MLQ 5X)

Organizational Climate Descriptor for Elementary Schools (OCDQ-RE)

Professional Learning Communities (PLC's)

Professional Learning Teacher Leader (PLTL)

Variance Inflation Factor (VIF)

CHAPTER ONE: INTRODUCTION

Overview

Leadership – in its various forms within education – is important for success of the school or organization (Ghamrawi, 2010). Within schools, leadership exists in many forms – students, parents, teachers, and principals all emerge as leaders in various types (Barth, 1990). Collay (2013) acknowledges that leadership takes place each day within and outside of the classroom. This study acknowledges the existing literature regarding the effect of the principal on school climate (Leithwood, Seashore-Louis, Anderson, & Wahlstrom, 2004; Moolenaar, Daly, & Slegers, 2010; Pepper & Thomas, 2002) and seeks to explore an additional layer of leadership – teacher team leaders, or those serving in a defined role of team leader. According to Dinh et al. (2014), the topic of team leadership and examining the organizational context is gaining more attention, but it is still under-researched and it is suggested additional studies be conducted. Roby (2011) examined teachers and their influence on school culture and recommended that further research be conducted on two constructs – teacher leadership and school culture. In this study the history of leadership, specifically organizational leadership within schools, was explored, as well as the constructs of school climate and leadership dimensions. This study examined the predictive relationship between these two constructs.

Background

A positive school climate has an enormous effect on student motivation, self-actualization, empowerment, and engagement – which all lead to increased student achievement (Hughes & Pickeral, 2013; Gottfredson & Hollifield, 1988). School climate is the set of qualities or attributes that distinguish one organization from another (Campbell, Dunnette, Lawler, & Weick, 1970; Hoy, Hannum, & Tschannen-Moran, 1998). The National School Climate Center

(2014) identifies school climate with four main areas of focus - safety, relationships (among students, among students and teachers, and among teachers and parents), teaching and learning, and the overall school environment. Researchers (Black, 2010; Cohen, McCabe, Michelli, & Pickeral, 2009; Ross & Cozzens, 2016; Wallace Foundation, 2006, Whitaker, 1997) identify leadership as one of the most critical factors that influence school climate.

Leadership has many working definitions by researchers, and a summary of those definitions is a person who influences a group of people or individuals (Nahavandi, 2014). While the many working definitions by multiple researchers (Benne & Sheats, 1948; Stogdill, 1950; Stone & Patterson, 2005) examine different characteristics of leadership, the main commonality among leadership definitions is that leaders influence others. Nahavandi (2014) describes three similarities that leadership definitions share – the essence of a group phenomenon, the quality of being goal directed and action oriented, and the aspect of having a recognized hierarchy in a group. First, leaders must have followers. The relationship between leaders and followers must share mutual influence. Second, leadership involves being action oriented and directed towards a goal. Leaders are actively involved and motivate others to work towards their goals. Third, the group must establish a hierarchy. Nahavandi (2014) notes that regardless of the setting – formal and defined or informal and flexible – people must realize that they need a leader.

In various sectors, leadership is recognized by many individuals and offers a source of influence or authority. In the business sector, Kamisan and King (2013) affirm that the role of leadership is significant in regards to the level of success of the organization. According to Kamisan and King, there are two styles of leadership – transactional and transformational. Defined as the style of leadership in which the leader inspires followers to exceed the expectation and perform at their personal best based on motivation and encouragement is

transformational leadership (Avolio & Bass, 2004; Bass, 1985). Defined as the style of leadership that appeals to followers in a sense of making a “transaction” with them is transactional leadership. In exchange for doing something well, transactional leaders reward employees, or when something is not done well, transactional leaders correct them (Eagly, Johannesen-Schmidt, & van Engen, 2003). Leadership dimensions, as used in the Multifactor Leadership Questionnaire (Avolio & Bass, 2004) are refined constructs within each leadership style. Within the transformational leadership style, there are five leadership dimensions: Idealized Influence-Attributed, Idealized Influence-Behavior, Inspirational Motivation, Intellectual Stimulation, and Individualized Consideration. Within the transactional leadership style, two leadership dimensions exist: Contingent Reward and Management by Exception-Active.

In the educational arena, leadership – in its various forms – is important for success of the school or organization (Ghamrawi, 2010). In the school setting, leadership exists in many forms – students, parents, teachers, and principals all emerge as leaders in various types (Barth, 1990). It begins at the classroom level with the teacher leading the students, as well as student leaders emerging in order to lead their peers (Schleicher, 2012). Leadership continues to the school level where teacher leaders arise (Handler, 2010; Lieberman & Friedrich, 2010) and finally, the local administration team leads the staff and students. From there, it moves on to the district, state, and federal level – all with leadership roles identified at each level (Schleicher, 2012). Collay (2013) points out that leadership takes place each day within and outside of the classroom. She also concludes that “effective teaching and learning happens in all kinds of schools every day, as teachers lead by leveraging relationships within and beyond their classrooms” (Collay, 2013, p. 73; Lieberman & Friedrich, 2010). At the head of each school –

full of leaders in each classroom – are principals. Spiro (2013) notes that good principals are not only administrators, but they are also instructional leaders, tasked with providing staff with guidance and a sense of mission and providing students with the drive to be successful. In roles that support the principal, teacher leaders serving as team leaders or department heads, also have the responsibility to provide leadership to those around them (Lieberman & Friedrich, 2010; Schleicher, 2012; Wilhelm, 2013). This structure of leadership in which multiple leaders exist within one organization, as previously described by a group of researchers, (Collay, 2013; Ghamrawi, 2010; Lieberman & Friedrich, 2010; Schleicher, 2012; Spiro, 2013; Wilhelm, 2013) has not always been structured and recognized as it is today. In fact, teachers are learning what it looks like to lead side by side with their peers rather than relying on one leader from the top down (Lieberman & Friedrich, 2010).

Over the years, the study of leadership has evolved from solely an examination of leadership traits within a person, to an investigation into “understanding the relationship between the leaders’ actions and the follower’s productivity and satisfaction” (Bass, 1960, 1985; Stone & Patterson, 2005, p. 3). Leadership studies began by examining historical leaders and the individual attributes that made them successful. As time has passed and new information has become available, leadership studies have shifted focus to examine styles of leadership (Bass, 1990). These new types of leadership studies in which actions, productivity, and satisfaction have become the focus, has helped redefine leadership theories. In fact, Stone and Patterson (2005) also note that in the 1970s, a new leadership theory emerged and became famous by the early 1980s. This leadership theory has become known as the Transactional Leadership Theory (Bass, 1990). This theory explains that leaders offer rewards in exchange for something valuable, but this type of leadership may not consider the aspect of leadership that shares a vision

or sets goals. In exchange for doing something well, transactional leaders reward employees, or when something is not done well, transactional leaders correct them (Eagly et al., 2003).

Another type of leadership that began to emerge is transformational leadership. This type of leadership is an expansion of transactional leadership and motivates others to excel to their best. It also passes on the torch of leadership, helping others identify the leader within themselves (Bass, 1990).

An additional leadership style that has emerged is servant leadership. This style shares many similarities with transformational leadership. Some of the parallels between the two theories include trust, influence, vision, respect, sharing of responsibilities, appreciation for followers, modeling, and integrity (Stone, Russell, & Patterson, 2004). Additionally, both leadership styles share a focus of people-centered leadership (Stone et al., 2004). Within servant leadership, leaders focus on their followers and value the productivity of their followers (van Dierendonck & Nuijten, 2011). While transformational leadership also focuses on the followers, the variation is that transformational leaders inspire followers to engage in and support the organizational focus. This information on the evolving topic of leadership styles is important for school settings, in that research shows that principals have a positive effect on school climate (Leithwood et al., 2004; Wallace Foundation, 2012). In turn, a positive school climate has a positive effect on student achievement.

It is important to consider the ways in which interactions with others occur. DePree (1987) states that the signs of outstanding leadership are evident among the followers. When followers are reaching their potential, managing conflict, and learning and achieving desired results, the reflection on the leader is positive (DePree, 1987). This is one of the external gauges of leadership.

Cody (2013) suggests another form of leadership. Collaborative leadership is another aspect to consider, as this type of leadership aims to bring out the best in others and allows teachers to have a voice. Cody asserts that leadership is a quality that everyone possesses from within, and sometimes “the wisest leaders may actually do less leading as they create space around them for others to develop and grow” (p. 71). This type of leadership is not limited to the educational platform, but applies to any arena – recognizing that everyone has a strength in something and can share it with others. Gronn (2002) and Bolden, Petrov, and Gosling (2009) discuss the importance of shared governance and distributed leadership. Both of these concepts place emphasis on shared decision-making and the importance of people having a voice.

The study of teacher leadership styles and the potential effect on elementary school climate is primarily situated within the Transformational Leadership Theory that was initiated by Burns (1978) and expanded upon by Bass (1985). The tenet this theory was based upon is through inspiration, energy, and strength of vision; leaders are able to inspire followers to move towards a common goal. Bass (1985) also noted that according to this theory, followers feel a sense of respect and high regard for their leader. Under the larger scope of the Transformational Leadership Theory are subcategories, or leadership dimensions. These are intellectual stimulation, individualized consideration, inspirational motivation, and idealized influence. Intellectual stimulation encourages creativity in ways of doing things and finding the means to the end. Individualized consideration offers collaboration and encouragement to followers as individuals. In doing this, the communication is open, and followers feel welcome to share ideas freely. Inspirational motivation is the clear vision that leaders are able to share with followers. Kouzes and Posner (2012) continue to highlight this characteristic as one of the five components to an effective leader. Lastly, idealized influence is the element of role modeling. When

followers respect their leader, they emulate their behavior (Bass, 1985). This theory of transformational leadership also includes elements of Maslow's (1943) hierarchy of needs in that leaders inspire followers to exceed the expectations and develop themselves further. In doing so, these followers reach the self-actualization phase of the Maslow (1943) hierarchy. Followers reach this phase through support, encouragement, and guidance from leaders, and the desire for them to do their best work is present (Bass, 1985).

Related to this study of leadership styles and its effect on school climate, Hersey and Blanchard (1976) began with the Life Cycle Theory that transformed into the Situational Leadership Theory in 1977. This idea was that the style of leadership needed varied based on the situation and the followers involved with that task. Higher levels of maturity in followers would necessitate a different type of leadership than the type of leadership that needed for lower maturity followers. The followers with lower levels of maturity need more socio-emotional support, as the more mature followers need less structure and less socio-emotional support (Vecchio, 1987). Associated with the current study, leaders may not consistently exhibit the same style of leadership at all times. The Situational Leadership Theory supports the notion that based upon the need of their followers, leaders may display one leadership style at one point, and another leadership style in a different situation. The assessment instrument, Multifactor Leadership Questionnaire (Avolio & Bass, 2004) also supports this theory, as the final score is not nominal data, but interval data. However, it shows the leadership style that the leader exhibits most often with the acknowledgement that other leadership styles may also be demonstrated by the leader at different times (Avolio & Bass, 2004). In this study, perceptions of teachers in relation to the school climate as influenced by teacher leaders in defined roles will be examined.

Problem Statement

The literature suggests that there is a relationship between school leadership and school climate, specifically the effect of principals' leadership styles on school climate (Aydin, Sarier, & Uysal, 2013; Moolenaar et al., 2010; van Dierendonck & Nuijten, 2011). Smylie (1992) asserts that teacher interactions with teacher leaders can elicit positive and negative feelings based on situational circumstances and relationships between the teacher and teacher leader. Aydin et al. (2013) found that transformational and transactional leaders have a significant effect in a positive way on school climate. This supports the findings of Moolenaar et al. (2010) that principals exhibiting the transformational leadership style showed a positive connection with innovative school climates.

However, researchers do not outline the effects that the leadership styles, specifically leadership dimensions, among teacher team leaders have on school climate. Dinh et al. (2014) express that among leadership studies conducted since the beginning of this millennium, several trends have surfaced, and under-researched topics have emerged. Among the trends noted by Dinh et al. (2014), literature regarding team leadership has seen a significant increase in recent years as the social context of leadership and the effect of a team as a whole is becoming a focus among studies. While Porter and McLaughlin (2006) noted that this topic of research is widely relevant, they conclude that this aspect of leadership – team leadership – still needs further exploration. Dinh et al., (2014) also affirms that although this area of leadership is gaining more attention, it is still considered under-researched and suggests that further studies be conducted in the area of team leadership due to the “lack of attention to contextual, team, and overall organizational effects of leadership” (p. 15). More specifically, Roby (2011) suggested that researchers conduct additional investigations into teacher leadership in regards to school culture

and the impact of teacher leaders on school culture. The problem is that no one has examined the relationships among teacher team leaders' leadership dimensions and elementary school climate.

Purpose Statement

The purpose of this predictive correlational study was to examine relationships between leadership dimensions of teacher team leaders and elementary school climates. The predictor variables used in this study are the nine leadership dimensions among teacher leaders, measured by the Multifactor Leadership Questionnaire, as well as the Principal Openness Index (a combination of the subscales Supportive Principal Behaviors, Directive Principal Behaviors, and Restrictive Principal Behaviors) as measured by the Organizational Climate Descriptor for Elementary Schools. The criterion variable is the school climate, broken down into four areas as measured by three subscales within the Organizational Climate Descriptor for Elementary Schools (Collegial Teacher Behaviors, Intimate Teacher Behaviors, Disengaged Teacher Behaviors, and Teacher Openness Index). This study was conducted within a school district in northern metro area in Atlanta in 10 elementary schools, with approximately 166 teacher team leaders and 476 other teachers.

Significance of the Study

This study aimed to extend the existing body of knowledge on leadership dimensions and their effect on school climate, but it explored an additional layer of leadership –teacher team leaders, or those serving in a defined role of team leader. According to Dinh et al. (2014) the topic of team leadership and examining the organizational context is gaining more attention, but it is still under-researched and it is suggested additional studies be conducted. Roby (2011)

examined teachers and their influence on school culture and recommended that further research be conducted regarding the two constructs – teacher leadership and school culture.

In looking at school culture and school climate, Deal (1990) interchanges the term “climate” with the word “culture,” although Macneil, Prater, and Busch (2009) describe the vast overlap in the two terms and the minute difference between the two. The variation described by Macneil et al. lies within the depth of the examination. They explain that school culture goes back to the historical roots, values, and traditions within the school while school climate is more easily altered and relates more to the behavior of the school; thus school climate is encompassed by school culture (Macneil et al., 2009). The current study explored relationships between teacher leaders’ leadership dimensions and elementary school climate. The information gained further supports the Transformational Leadership Theory (Bass, 1985), as well as sheds light on the relationships between teacher leaders’ leadership dimensions and elementary school climate for principals. Elementary principals may use results from this study as they make selections regarding new teacher team leaders for the upcoming school years.

Research Question

The following research questions guided the current study:

RQ1: How accurately can collegial teacher behavior be predicted from a linear combination of various leadership dimensions (Idealized Influence-Attributed, Idealized Influence-Behavior, Inspirational Motivation, Intellectual Stimulation, Individualized Consideration, Contingent Reward, Management by Exception-Active, Management by Exception-Passive, Laissez Faire, and Principal Openness Index) among teacher team leaders in elementary school?

RQ2: How accurately can intimate teacher behavior be predicted from a linear combination of various leadership dimensions (Idealized Influence-Attributed, Idealized Influence-Behavior, Inspirational Motivation, Intellectual Stimulation, Individualized Consideration, Contingent Reward, Management by Exception-Active, Management by Exception-Passive, Laissez Faire, and Principal Openness Index) among teacher team leaders in elementary school?

RQ3: How accurately can disengaged teacher behavior be predicted from a linear combination of various leadership dimensions (Idealized Influence-Attributed, Idealized Influence-Behavior, Inspirational Motivation, Intellectual Stimulation, Individualized Consideration, Contingent Reward, Management by Exception-Active, Management by Exception-Passive, Laissez Faire, and Principal Openness Index) among teacher team leaders in elementary school?

RQ4: How accurately can teacher openness be predicted from a linear combination of various leadership dimensions (Idealized Influence-Attributed, Idealized Influence-Behavior, Inspirational Motivation, Intellectual Stimulation, Individualized Consideration, Contingent Reward, Management by Exception-Active, Management by Exception-Passive, Laissez Faire, and Principal Openness Index) among teacher team leaders in elementary school?

Definitions

This study used the following definitions:

1. *Leadership* – The current study adopts a definition of leadership coined by Stogdill (1950) as “the process (act) of influencing the activities of an organized group in its efforts toward goal setting and goal achievement” (p. 4).

2. *School Climate* – Halpin and Croft (1963) likened school climate to one's personality. .
In the same way that there are many elements that comprise a personality, there are also many subareas that encompass school climate. Overall, school climate can be encapsulated by the set of qualities or attributes that distinguish one organization from another (Campbell et al., 1970; Hoy et al., 1998).
3. *Leadership style* – an indicator of the “leader’s deep-seated educational beliefs” (Goldman, 1998, p. 21). There are many names for these beliefs, and the three that are examined within this study are transformational leadership style, transactional leadership style, and laissez-faire leadership style.
4. *Transformational leadership style* – A leadership style in which the leader inspires followers to exceed the expectation and perform at their personal best based on motivation and encouragement (Avolio & Bass, 2004; Bass, 1985).
5. *Transactional leadership style* – A leadership style which appeals to followers in a sense of making a “transaction” with them. In exchange for doing something well, transactional leaders reward employees. When something is not done well, transactional leaders correct them (Eagly et al., 2003).
6. *Laissez-faire leadership style* – A leadership style in which the leader is passive and not directly involved. Eagly et al. (2003) state that this leadership style fails to take responsibility for managing.
7. *Principal Openness Index* - According to Hoy (2005), the Principal Openness index can be calculated using standardized scores obtained from specific subscales (Supportive Behavior, Directive Behavior, and Restrictive Behavior) all pertaining to the behaviors of

the principal. This index provides information on the effect of the principal on overall school climate.

8. *Teacher Openness Index* - According to Hoy (2005), the Teacher Openness index can be calculated using standardized scores obtained from specific subscales (Collegial Teacher Behavior, Intimate Teacher Behavior and Disengaged Teacher Behavior) all pertaining to the behaviors of teachers. This index provides teacher perceptions pertaining to school climate regarding overall teacher behaviors.
9. *Teacher (team) leaders* – In the county in which this study was executed, team leaders are defined as one teacher per grade level or team – Special Education, Early Intervention and English as a Second Language teachers, Specials (Physical Education, Art, Music, Computer, etc.) who is selected to serve on the school leadership team. This leadership team meets periodically to discuss important trends in education and school happenings. The teacher team leader relays information to fellow team members in the same grade level or team.

Teacher team leaders may also be part of the Data Management Team at each school.

The responsibilities associated with this role are analyzing school data, goal setting, monitoring progress, and helping generate strategies for improvement, as well as working with administrators on the School Improvement Plan. These teacher team leaders may or may not hold other responsibilities within the school. Questions and concerns from teammates working in the same team or department channel through team leaders before going to administrators. In short, the school's administration appoint teacher team leaders to serve as the liaison between administration and classroom teachers. They are

the appointed leader of their department or team. Teacher team leaders serve an important role in insuring they transmit information correctly and decisions are made appropriately.

10. *Leadership Dimensions* – Specific constructs which make up the full range leadership model; these may range from highly transformational to highly avoidant, thus comprising the three leadership styles – transformational, transactional, and laissez faire (Avolio & Bass, 2004).
11. *Idealized Influence-Attributed* – A dimension of Transformational Leadership style, leaders demonstrating Idealized Influence-Attributed are those who are admired, respected and trusted. These leaders consider the needs of their followers before their own, instill pride in others, go beyond for the benefit of the organization, and display a sense of power and confidence (Avolio & Bass, 2004).
12. *Idealized Influence-Behavior* – A dimension of Transformational Leadership style, leaders demonstrating Idealized Influence-Behavior are also those who are admired, respected and trusted. They talk about the most important values and beliefs, articulate the importance of purpose, and emphasize the importance of a shared mission (Avolio & Bass, 2004).
13. *Inspirational Motivation* – A dimension of Transformational Leadership style, Inspirational Motivation is the process of leaders who inspire others through expressing shared goals and understandings, communicating a clear vision, and promoting positive expectations (Avolio & Bass, 2004).
14. *Intellectual Stimulation* – A dimension of Transformational Leadership style, Intellectual Stimulation is encouraging others to “think about old problems in new ways” (Avolio & Bass, 2004, p. 29). Leaders encourage others to be forward thinking and be problem-

solvers for unforeseen problems. This builds capacity within the organization (Avolio & Bass, 2004).

15. *Idealized Consideration* – A dimension of Transformational Leadership style, Idealized Consideration takes place when leaders think of others within the organization as unique individuals, realizing that they have their own set of needs and varying levels of potential (Avolio & Bass, 2004).
16. *Contingent Reward* – A dimension of Transactional Leadership style, Contingent Reward takes place when leaders clearly outline expectations of followers and what followers will receive when the performance expectations are met (Avolio & Bass, 2004).
17. *Management by Exception-Active* – A dimension of Transactional Leadership style, Active Management by Exception is found within leaders who articulate the standards for compliance and outline actions that constitute ineffectiveness. This type of leadership also watches closely for mistakes and takes corrective action as soon as possible (Avolio & Bass, 2004).
18. *Management by Exception-Passive* – A dimension of Laissez-Faire Leadership style, this type of leader is more passive and reactive. Within this type of leadership, leaders avoid clarifying expectations and often fail to take action until problems are serious or chronic (Avolio & Bass, 2004).
19. *Laissez-Faire Leadership* - A dimension of Laissez-Faire Leadership style, this type of leadership is actually the absence of leadership, according to Avolio and Bass (2004). The laissez-faire leader can be avoidant in making decisions or avoidant in becoming involved (Avolio & Bass, 2004).

CHAPTER TWO: LITERATURE REVIEW

Overview

Leadership, as a concept, first emerged as a topic of study in the 1930s. The focus of these studies were on the leadership traits in terms of leaders versus non-leaders. The majority of these studies were not grounded in a theory; rather they examined universal characteristics (House & Aditya, 1997). Within this chapter, the evolution of the construct of leadership studies in general, as well as in the educational setting are discussed. Additionally, the study examines the construct of school climate. Freiberg and Stein (1999) said that school climate is like the heartbeat of the school. Gottfredson and Hollifield (1988) note that school climate is the predictor of the level of success of the school. It has the power to determine if the school will attain excellence or flail ineffectively. The coexistence of these two constructs and the relationship between them is the focal point of this study and is firmly grounded within existing literature.

Theoretical Framework

Transformational Leadership Theory

Making the first distinction between transformational and transactional leaders, Downton (1973) was the first to differentiate the two leadership styles as separate entities in order to account for differences among leaders. Once Burns' (1978) work appeared concerning political figures, Downton's ideas became more concrete (Avolio & Bass, 2004). Burns' (1978) work described that of transactional and transformational leaders. Bass (1985) extended the definition written by Burns (1978) by specifically defining characteristics of each type of leader. Avolio and Bass (2004) explain that transformational leaders are visible at any place in the organization – from the very top all the way down to the bottom of the organization, as well. One of the

benefits of transformational leadership, as noted by Avolio and Bass (2004) is that this type of leadership motivates followers to go beyond expectations and exceed the goals set before them. The process of sharing the vision for the organization, coupled with charisma and motivation helps build “trust, respect, and a wish to work collectively towards the same desired future goals” (Avolio & Bass, 2004, p. 18).

Situational Leadership Theory

According to Hersey and Blanchard’s (1976) Situational Leadership Theory, there are four categories of leadership, and they increase in the following order: telling, selling, participating, and delegating. The maturity of the follower should decide the category of leadership used. Hersey and Blanchard suggest that the low maturity followers should receive telling, and as the maturity of the follower increases, then it is appropriate to increase the category of leadership used with them. Telling is for those with low maturity and it involves giving clear, specific directions and supervision. Selling is for followers with low to moderate maturity and includes a directive behavior due to the follower’s sense of willingness but absence of responsibility. This category is one in which the leader tries to motivate the follower to do the desired behaviors. Participating is for moderately to highly mature followers and involves the leader being the facilitator through a shared process. Hersey and Blanchard suggest using this situation while the follower’s confidence is still building. The final category, delegating, is used for high maturity followers who need little direction or support. These followers are highly motivated and have a high level of ability to perform the desired task (Hersey & Blanchard, 1976). Fernandez and Vecchio (1997) emphasize that potentially one of the highest impacts that Hersey and Blanchard’s Situational Leadership Theory will have is offering the reminder that all

situations need to be considered individually and followers treated differently based on each situation.

In looking at the Transactional Leadership Theory (Avolio & Bass, 2004), as well as the Situational Leadership Theory (Hersey & Blanchard, 1976) as they pertain to organizational school climate, the two theories share commonalities. The spectrum of leadership described by Avolio and Bass (2004) serves as a guide for different types of leadership styles. On this spectrum, the three main leadership styles are laissez faire, transactional, and transformational. It is explained that leaders may vary in their placement on the spectrum depending upon the exchange and motive for the task at hand. When using the MLQ 5X as an assessment tool, the leadership dimensions are scored through continuous interval data and the score reflects strengths among specific constructs within each of the three leadership styles (Avolio & Bass, 2004).

Within the Situational Leadership Theory, Hersey and Blanchard (1976) explain that leaders use varying levels of supportive leadership based on the maturity of the followers. This theory also states that one task is developed at a time, beginning with the lowest quadrant, moving up to the highest in which the job maturity and psychological maturity is at the highest level. Once each follower develops through the four quadrants, a new task starts at the lowest quadrant with the same follower, and the cycle continues in order to develop a leader from a follower (Hersey & Blanchard, 1976). According to the Transformational Leadership Theory, transformational leaders develop followers into leaders by helping them move beyond seeing the interest of an individual to seeing the collective interest through inspiring them to go beyond the expectations (Avolio & Bass, 2004). Additionally, both theories allow for fluctuation among

levels of leadership, and both theories examine the development level of followers (Avolio & Bass, 2004; Hersey & Blanchard, 1976).

Related Literature

Regardless of defined leadership roles, anyone who functions as an effective agent of change can be a leader. In this light, each person in an organization has the potential to be a leader. The purpose of leadership is fostering change by intentionally moving forward toward a future vision or goal (Astin & Astin, 2000). Consistent with this proposition, the leader – whether in a defined leadership role or not – is one who fosters change within the organization. Some changes fostered by leadership have internal implications, and others are external.

Neuroscientists (Rock, 2009) have examined brain functions in terms of threats and rewards. Rogers' (1975) research shows the type of effect on reactionary feelings stem from processes in the limbic system in which the brain seems to minimize threats and maximize rewards. This has become known as the Protection Motivation Theory (Rogers, 1975). Relevant to leadership, the reactions of leaders to followers can create feelings within followers in as little as one fifth of a second. The reactions that elicit threats overpower those that elicit rewards (Rock, 2009). Status, certainty, autonomy, relatedness, and fairness are the five needs identified in relation to brain functioning. When positive recognition is received, these feelings are elevated; however, when criticism is given from leaders, it has been found that the supply of glucose and oxygen are limited in the prefrontal cortex, and the ability to generate higher order responses are somewhat limited, thus, learning is weakened. As Rogers' (1975) research shows leaders can have on large effect on a follower's brain functioning in a short amount of time. Therefore, it becomes relevant to examine the types of leadership styles that can maximize the

work done in schools to have a more positive impact on school climate. School climate is one of the main indicators of a school's level of success (Gottfredson & Hollifield, 1988).

The phenomenon of leadership can be seen throughout years, dating back to ancient times (Bass, 1990); however, the term "leadership" first emerged as a topic of study in the 1930s. Some of the earliest studies on leadership occurred between the 1930s and 1950s, and the focus of these studies were on the leadership traits in terms of leaders versus non-leaders. Many of the traits studied were physical traits – gender, height, energy, attractiveness – as well as intentions, need for accomplishment, and the need for authority. The majority of these studies were not grounded in a theory; rather they examined universal characteristics (House & Aditya, 1997). In 1938, Barnard distinguished leadership as the capability of a superior to affect the behavior of followers and encourage them to follow a specific course of action. Research studies such as Gibb (1947) and Jenkins (1947) noted relationships of effective leaders with the studied traits having correlations as high as .50. Consideration of this statistic, as well as the inability to replicate studies, necessitated further research in this area. Stogdill (1948) recognized the importance of leadership traits but recommended that the trait study be placed into context of conditions that leaders face. In 1950, the scope of the definition of leadership narrowed when groups and organizations were defined (Stogdill, 1950). Stogdill (1950) explains that the existence of leadership needs a minimum of the following social provisions: an established group of two or more people, a common goal, and distribution of tasks.

Leadership Styles

Over years, leadership and leadership styles have developed, dating back centuries ago (Bryman, 2011). Avolio (2004) defines full range leadership as "a comprehensive life-span process that involves the accumulation of unstructured and structured experiences and their

impact on the maturation of both leaders and followers” (p. 71-72). He also states that at the core of full range leadership is the concept of developing oneself in order to develop others, as well.

In 1978, Burns developed his model of leadership, which drew on Weber’s (1924/1947) work on social organization as a basis for the developmental model. In 1978, Bass added to Burns’ work by giving a sharpened focus regarding high-impact leadership. Bass also mentioned charisma in his work; however, charismatic leadership was revered as something that was too difficult to measure and difficult to develop among leaders (Bass, 1985). In 1987, Avolio and Bass began working on the addition of charisma as an element of transformational leadership. One year later in 1988, Avolio and Gibbons (1988) extended Bass’ work by discussing ways in which transformational leadership could be established through organized training situations.

Spectrum of Leadership

According to Bass and Avolio (1993), all leaders fall within a spectrum. At the low end of the spectrum, Bass and Avolio mention that the non-transactional leaders can be referred to as Laissez Faire leaders. These types of leaders are comfortable with allowing followers to figure things out on their own, and no agreements or guidance is offered. This type of leader does not work to advance themselves or followers. Moving on from Laissez Faire leadership is the transactional leader. This type of leader is more active, but there are still various sub-categories within this style. Passive avoidant leaders are reactive and come into action when something goes wrong. This style of leadership causes followers to be reluctant to take risks for fear of making mistakes (Avolio, 2004).

The other style within transactional leadership is Management by Exception, in which leaders focus on the things that are wrong as well as the things that could possibly go wrong.

This type of focus is still considered an exchange, but one of negativity (Avolio, 2004). The positive side of this perspective of exchange between leader and follower is known as transactional contingent reward and focuses on the reward and recognition. This style, described by Downton (1973) builds trust and creates a relationship where both the leader and follower benefit. Transactional leadership has grown into building followers up into leaders, which provides a foundation for the next leadership style in the spectrum – Transformational Leadership.

Leaders provide opportunities for followers to complete tasks while considering the follower's needs and ability. In doing this, leaders provide individual consideration. This added element of individual consideration moves the leadership from transactional to transformational (Avolio, 2004). Intrinsic motivation as well as moving from the perspective of individual interests to collective interests are all elements of follower development within transformational leadership style. Leaders who exhibit this style of leadership challenge followers, while motivating them to achieve higher levels and move beyond expectations (Bass & Avolio, 1993). This is the transformation that occurs among followers for which Transformational Leadership is named. All along the spectrum of leadership are individual leadership dimensions. These dimensions are actually specific constructs that make up the full range leadership model, and the leadership dimensions range from highly transformational to highly avoidant, thus comprising the three leadership styles – transformational, transactional, and laissez faire (Avolio & Bass, 2004).

Transformational Leadership

Transformational leadership is a type of leadership that all leaders can achieve to some extent, depending on the difficulty of the task (Doci & Hofmans, 2015). The following

leadership dimensions known as the Four I's of Transformational Leadership can characterize transformational leaders: idealized influence, inspirational motivation, intellectual motivation, and individualized consideration (Avolio, Waldman, & Yammarino, 1991). Individualized consideration takes on a mentor mindset – learning to listen to each employee and tapping into his strengths, as well as being ready to stand up for the employee if the need arises, are characteristics of this element of transformational leadership. Through intellectual stimulation, transformational leaders help employees take on a new mindset to think about old problems. This element of a transformational leader encourages employees to reconsider personal situations or work-related issues in a new light. Conversely, within this element, transformational leaders also challenge their own thinking when presented with an idea or problem, and they are open to new ideas from employees. Having a good work ethic displayed by the leader is an example of inspirational motivation. Within this realm of transformational leadership, leaders often motivate workers to continue the good work in an upbeat, positive manner. Charisma is a term often associated with this element of transformational leadership. The final element of the Four I's is idealized influence. This element is a culmination of the other three elements, as the leader shows such strong respect for others and sets the example that causes others to want to follow, as well as find the leader within themselves.

According to Avolio et al. (1991), one key characteristic of transformational leaders is the willingness to change and or develop himself. Realizing one's own weaknesses and highlighting one's strengths are paramount for a transformational leader (Avolio et al., 1991). Rather than maintaining acceptable standards, the transformational leader is one who tries to communicate a shared vision in the direction the organization should be headed.

One benefit of transformational leadership is the direct impact on employee psychological well-being due to the element of trust in the transformational leader (Kelloway, Turner, Barling, & Loughlin, 2012). In a study conducted, it was found that one direct link between transformational leadership and job satisfaction was the element of individualized consideration (Long, Yusof, Kowang, & Heng, 2014). These authors acknowledge that other studies such as Bodla and Nawaz (2010) and Riaz and Haider (2010) have found positive correlations among all elements of transformational leadership and employee job satisfaction, even though their findings only produced the positive correlation within the single area (Long et al., 2014).

In another study conducted by Garcia-Morales, Jiminez-Barrionuevo, and Gutierrez-Gutierrez (2012), significant, positive correlations were found among organizational learning, innovation, and performance when coupled with transformational leadership. The authors concluded that transformational leadership is necessary among organizations to improve performance with real life business settings (Garcia-Morales et al., 2012).

Transactional Leadership

Transactional leadership is the most commonly referred to term when discussing effective leadership (Avolio et al., 1991). Burns (1978) articulated that transactional leadership occurs when someone takes initiative to work with others to exchange things of value. In this type of leadership, leaders clearly communicate the work that is to be done, how it should be done, and the benefits that accompany the task being done well. Consequently, followers know exactly what the expectations are and communication is clear. There is no relationship outside of the job at hand (Burns, 1998). Followers are motivated to meet the expectations as they are aware of what their benefits will be for meeting the standard. These benefits can range from

increases in pay, commendation, satisfactory job ratings, recognition, or other similar things (Avolio et al., 1991). Within this form of leadership, goal setting and knowing the strengths and weaknesses of workers is important for leaders. Additionally, transactional, while widely known, is most commonly associated with maintaining standards and attaining acceptable job performance from various levels of the organization (Avolio et al., 1991).

Inside the realm of transactional leadership are two leadership dimensions. Management-by-exception is transactional leadership that is corrective rather than constructive (Avolio & Bass, 2004). This style is one that is active and keeps close supervision, correcting quickly as needed. The second subcategory is passive management by exception. In this style of leadership, the leader tends to avoid situations until a problem has occurred, and does not set expectations. Instead, this style of leader handles issues as they arise (Avolio & Bass, 2004).

Laissez-Faire Leadership

This style of leadership, according to Avolio & Bass (2004) is the absence of leadership. The laissez-faire leader can be avoidant in making decisions or avoidant in becoming involved (Avolio & Bass, 2004). Eshbach and Henderson (2010) affirm that this type of leadership does not yield positive results, and that followers often view it negatively. Some studies also refer to this type of leadership as destructive leadership in which subordinates feel bullied at work or belittled in order to get the job done (Einarsen, Aasland, & Skogstad, 2007; Skogstad, Einarsen, Torsheim, Aasland, & Hetland, 2007). In fact, Beer and Clower (2014) contend that the greatest place of risk for an organization is not bad leadership, but the absence of leadership.

Development Levels of Followers

Pigors (1934) defined four types of followership, and noted these types were not vastly different from types of leadership. The four types of followership described are constructive,

subversive, routine, and impulsive followership (Pigors, 1934). Constructive followers are able to execute tasks quickly, while offering much input and judgement along the way. Subversive followers also carry out responsibilities quickly, but they keep their own interests at heart and sometimes may be slightly disloyal.

Within the Transformational Leadership Theory, there are three domains of follower development – motivation, morality, and empowerment – that make up the conceptual framework (Dvir, Eden, Avolio, & Shamir, 2002). According to Burns (1998), transformational leaders, as opposed to transactional leaders, develop followers in a way that helps the followers attain higher levels of needs on the Maslow (1943) hierarchy. Rather than meeting solely the basic needs on the hierarchy, transformational leaders help their followers have an increased sense of motivation, engaging with them (Burns, 1998), and moving them on toward the self-actualization phase on the Maslow (1943) triangle. Bass (1985) notes that the amounts of extra effort that is put in by followers as they grow closer to the self-actualization phase shows the higher levels of motivation instilled by the leaders whom they follow. The second domain, morality, is initially addressed by Burns (1978) as the second part of the developmental continuum, and is based on the Moral Development concept created by Kohlberg (1971). Morality has been assessed by looking at the followers' internalization of the moral values of the organization (Dvir et al., 2002). This is in alignment with Burns (1978) and Bass' (1985) theory that transformational leaders inspire moral values. The third domain, empowerment, is based upon the tenet that transformational leaders motivate followers to be self-directed and autonomous as they move along in their development.

Gardner, Avolio, Luthans, May, and Walumbwa (2005) describe leadership and followership as a relationship with one another. Bass (1960) clarifies that leadership and

followership do not relate negatively; rather they follow essentially the same process to a certain degree (Bass, 1960). Interactions between the leader and follower help each to know who they are and what impact they have on the other (Gardner et al., 2005). Hersey and Blanchard's (1976) Situational Leadership Theory supports this concept, as described in the four quadrants of leadership. This theory states that the type of leadership practiced will vary based upon the maturity of the follower (Hersey & Blanchard, 1976). Gardner et al. (2005) states that followers whose objectives and goals align well with those of the leader welcome the opportunity to follow the leader. Knowingly or unknowingly, sometimes followers whose visions align so well continue learning from the leader until they are ready to take on leadership responsibilities of their own (Gardner et al., 2005). This corroborates Burns' (1978) Transformational Leadership Theory in which leaders lead in such a way that their followers are motivated to go beyond the expectations, reaching past the goals set before them.

Distributed Leadership

Harris (2013) asserts that few models of leadership have created as much tension and discourse within the educational leadership arena as distributed leadership. She affirms that the model is far from new; however, it reinforces the influences of multiple sources (Harris, 2013). Benne and Sheats (1948) initially mentioned the notion of sharing responsibility from many angles, which originated the concept of distributed leadership in the late 1940s. In terms of multilateral shared responsibility, Benne and Sheats (1948) explain that groups may operate with varying degrees of understandings and disagreements among members. They also emphasize that the diffusion of leadership still has responsibility and the leader is the one solely in charge of the production of the group and the goals towards which the group works (Benne & Sheats, 1948).

Once the initial idea of distributed leadership was voiced in general terms, others began to build upon this model of leadership. Gibb (1954) as well as French and Snyder (1959) closely examined the group component of distributed leadership. French and Snyder described leadership as a potential influence that one may have over another. They expanded on this by noting that if one person had any influence over another that it was considered leadership (French & Snyder, 1959). Katz and Kahn (1978) focus on how leadership effects an organization as a whole, and they specifically note the higher level of effectiveness when the leadership role is shared or distributed. Katz and Kahn acknowledge that the knowledge within or outside of the organization is not necessarily held at the top of the chain of command, rather it is spread out. By involving others through delegation, shared decision-making, and openness to ideas, a higher quality of product is produced (Katz & Kahn, 1978).

While there are many benefits and risks to distributed leadership, Gronn (2008) notes that in this model of leadership, opinions and ideas are easier to acknowledge. He explains that by increasing the voices of input beyond one sole leader, distributed leadership encourages employee participation (Gronn, 2008). While some may assume that formal leadership in the traditional method is contrary to the distributed model, Harris (2013) concludes that is simply different aspects of the practice of leadership. Pearce and Barkus (2004) astutely state that distributed leadership is not a “one-size fits all” model, while highlighting a few points to consider when determining if shared leadership is appropriate for various situations. They propose that,

The issue is not vertical leadership or shared leadership. Rather the issues are: (1) when is leadership most appropriately shared? (2) How does one develop shared leadership? And

(3) how does one utilize both vertical and shared leadership to leverage the capabilities of knowledge workers? (Pearce & Barkus, 2004, p. 55)

When the formal leader recognizes the task of supporting those within the organization that have the competency to lead, distributed leadership will be at its climax. Knowing when the expertise is needed and respectfully and authentically asking for help for the betterment of the organization is paramount for formal leaders within a distributed leadership setting. Finally, building up the leadership within the organization helps contribute to the overall success of the organization as a whole (Harris, 2013).

Shared Governance

Similar to distributed leadership, shared governance is primarily used among post-secondary schools originating with the 1915 American Association of University Professors (AAUP) and the Statement of Principles of Academic Freedom and Tenure in 1925 (Burke, 2010). Burke (2010) explains that shared governance provides the framework on which distributed leadership operates. Slater's (2008) qualitative study consists of focus groups and interviews, and it reveals that within shared governance brought down to the elementary and secondary levels, there is a strong sense of shared decision-making. These decisions involve school leaders, teachers, parents, and other members of the community. Each component of the decision making team is considered valuable and it is acknowledged that in this process, there are shifts in the traditional roles of each involved. The principal initiates the process as they move away from being the sole decision maker within the school, and in doing this, opportunities are created for students, teachers, and parents (Slater, 2008). Suddenly, under the idea of shared governance, teachers are viewed as experts in their field, parents are viewed as specialists about their children, and the two elements working together as a team opens up more

opportunities for success and possibilities for students (Slater, 2008). In some models of shared governance, industrial leaders are involved as well as community members. This helps create a common, understood commitment to the mission and vision of the school (Darling-Hammond & Friedlaender, 2008).

Professional Learning Communities

Another form of shared leadership, known as professional learning communities, draws upon the expertise of individuals and calls for adults to learn and grow together in order to maximize student learning (Wilhelm, 2013). In doing this, Wilhelm (2013) notes that teachers feel an increased sense of ownership in student achievement. In creating the professional learning community model within a school, the framework provides a powerful, effective way for school improvement with hard work and dedication. DuFour (2007) states that the focus must shift from teaching to learning and as teachers are learning together, student achievement will rise. He also notes that within this model, collaboration and accountability are at the crux of success (DuFour, 2007). Ball and Cohen (1999) support this concept in suggesting that only through collaborative inquiry and reflection is the instruction improved upon and further developed in order to make gains in student achievement.

Many believe that in order for rising teachers to become proficient in the field of education, time alone in the classroom and time to reflect is necessary. However, Ball and Forzani (2010) and Johnson (2010) concur that the number of hours is not the element of success, but collaborative experiences and reflection involving both master and novice teachers is what influences the teaching and learning process. In Rigelman and Ruben's (2012) study that aimed to support teacher candidates by offering a professional learning community setup for their experience, several teacher candidates placed great emphasis on their newly gained

understanding of the need to be reflective, evaluating the overall effect of their own lessons, and opening their classroom to others. Darling-Hammond and Friedlaender (2008) examined five schools that had many obstacles. The keys to success in each of the schools were collaboration and teamwork. One teacher in this study noted that “collaboration has a positive impact on morale” (Darling-Hammond & Friedlaender, 2008, p. 18).

Organizational Climate within Schools

First mentioned by Perry in 1908, the topic of school environment surfaced. Perry acknowledged that the school environment was subject to other factors that vary from community to community, and he suggests that the principal should take into consideration the “local character” of the school while “acting with them” and “reacting upon them” (Perry, 1908, p. 16-17). As years passed, school environment was further explored and became known as the school climate (Anderson, 1982; Freiberg & Stein, 1999; Gottfredson & Hollifield, 1988; Halpin & Croft, 1963; Haynes, Emmons, & Ben-Avie, 1997; Hughes & Pickeral, 2013). School climate is equivalent to the school’s personality (Halpin & Croft, 1963). Freiberg and Stein (1999) said that school climate is like the heartbeat of the school. Gottfredson and Hollifield (1988) note that the school climate is the predictor of the level of success of the school. It has the power to determine if the school will attain excellence or flail ineffectively (Gottfredson & Hollifield, 1988). Haynes et al. (1997) explain that school climate “refers to the quality and consistency among interpersonal interactions” that have an impact on the development of children (p. 322). Hughes and Pickeral (2013) emphasize that a positive school climate boosts student achievement and increases the overall sense of belonging. Conversely, directly linked to school climate is attendance (Reid, 1983) and behavior among students (Haynes et al., 1997). Additional studies show that social environment, behavior, and learning can be positively impacted when the

organizational processes of school climate are addressed (Flay, 2000; Patton et al., 2006; Zullig, Huebner, & Patton, 2011).

According to Tagiuri (1968), four domains of school culture exist - ecology, milieu, social system, and culture. Specifically, ecology refers to the physical setting of the school and the materials available, and the milieu is referring to the social system of people and groups. The patterns and relationships among the groups defines the social system, and the culture is the beliefs, values, and overall mission (Tagiuri, 1968). Additionally, the National School Climate Center joined together with the Center for Social and Emotional Education and the Education Commission of the States to update the formal definition of school climate concentrating on four major areas – safety, relationships (among students, among students and teachers, and among teachers and parents), teaching and learning, and the overall school environment (National School Climate Center, 2014).

Gottfredson and Hollifield (1988) explicitly state the necessary steps to creating a school improvement plan that is focused on climate. The importance of the climate is noted, and the initial step is to use a climate assessment to specify what the weak areas are that need improvement. Gottfredson and Hollifield (1988) explain the importance of using the data collected if time is going to be spent by stakeholders to evaluate the current climate. Next, identifying a weakness, setting goals, and researching programs and interventions to help the targeted area is important. From there, making a plan, identifying things that will be obstacles for the school, and establishing specific quality control standards will help with the consistency of the plan. Finally, evaluating progress towards the goal of increased school climate is critical (Gottfredson & Hollifield, 1988).

A variation on school climate found within the literature is ethical climate. Similar to school climate, compared to the school's overall personality, ethical climate is a step deeper within school climate (Liu & Yuan, 2014). Ethical climate goes beyond the overall school personality and refers to the ethical state of mind in which members are more aware of the organization's shared values and goals. Liu and Yuan (2014) note that organizations with higher ethical climate have a higher sense of understanding of the importance of shared values, as well as what ethical behavior is, and how to deal with problems that arise.

Collegial Teacher Behavior

Collegial teacher behavior is the first subscale used in Hoy's OCDQ-RE, and Hoy defines it as "supports open and professional interactions among teachers. Teachers are proud of their school, enjoy working with their colleagues, and are enthusiastic, accepting, and mutually respectful of their colleagues" (Hoy, 2005, para. 1). Pogodzinski, Youngs, and Frank (2013) note that there are three elements which comprise a collegial climate – degree of professional fit, levels of relational trust, and degree of collective responsibility. In their study measuring the collegial climate and the novice teachers' intent to remain teaching, they found that the ways in which novice teachers or teachers, within their first three years of teaching, perceived the collegial climate had an impact on their intent to remain teaching (Pogodzinski et al., 2013). They also noted that the findings were relevant to the teacher-level, as well as the contextual level of the climate, so that the overall feeling of collegiality played a role in addition to individual teacher relationships (Pogodzinski et al., 2013).

Intimate Teacher Behavior

The second subscale within Hoy's OCDQ-RE is intimate teacher behavior, and it is defined by the author of the instrument as "cohesive and strong social relations among teachers.

Teachers know each other well, are close personal friends, socialize together regularly, and provide strong social support for each other” (Hoy, 2005, para. 1). In a previous study, Tschannen-Moran and Hoy (1998) examined the topic of trust among teachers. They found that teacher trust among one another is closely linked with how they treat one another. They also found that the topic of trust within interpersonal relationships is a growing topic of interest (Tschannen-Moran & Hoy, 1998).

Disengaged Teacher Behavior

The third subscale used in measuring the school climate with the OCDQ-RE is disengaged teacher behavior. Hoy (2005) defines this as “lack of meaning and focus to professional activities. Teachers are simply putting in time in non-productive group efforts; they have no common goals. In fact, their behavior is often negative and critical of their colleagues and the school” (Hoy, 2005, para. 1).

Teacher Leadership

Consistent with the recent legislations urging increased accountability, (Every Student Succeeds Act, 2015), leadership continues to surface as a key factor when examining school reform and educational restructuring (Anderson, 2004). Educational leaders work in many places throughout the school building other than the man or woman in the principal’s office. Bolman and Deal (2003) discuss concerns with leadership as they warn of the dangers of an organization being “overmanaged but underled” (p. xvi). They explain that the sense of purpose among the organization may be eventually squandered.

Helping to counteract the concerns of Bolman and Deal (2003) regarding solely one leader managing an organization as opposed to leading, Emira (2010) asserts that two types of teacher leaders exist – formal and informal. Formal leadership roles may include tasks found at the

defined leadership level such as the principal and department heads in which supervising, mentoring, and attending meetings may be required. Informal leadership can transpire by simply suggesting new ideas or communicating past experiences with colleagues (Emira, 2010). York-Barr and Duke (2004) suggest that teacher leaders are defined as teachers and leaders alike, and they are either currently practicing teachers with respect from colleagues and significant teaching experience, or they have been in the past (York-Barr & Duke, 2004). One of the strong components of being a teacher leader is having the strong background of classroom experience. This makes teacher leaders seem approachable and understanding to colleagues, and it enables them to lead others (York-Barr & Duke, 2004). Teacher leadership typically arises from within, and it is exhibited in many different ways, all for the benefit of the students and the school overall (Helterbran, 2010). Kouzes and Posner (2012) describe five key components that extraordinary leaders practice – modeling the way, inspiring a shared vision, challenging the process, encouraging the heart, and enabling others to act. Formal or informal leaders may demonstrate these leadership keys, and the ways in which they apply these may look different at each level. Helterbran (2010) notes that both the principal and teachers have reciprocal responsibilities in the overall leadership of the school, but in order for this to happen, they must first establish an open, equitable relationship. One of the best forms of leadership takes place within the relationships among people, explains Helterbran (2010).

One thing that Anderson (2004) notes as critical to the purpose of leadership is being able to determine a course of action and move people along the path (Anderson, 2004). Another important aspect of leadership – in both formally defined roles and informal roles – is confidence (Helterbran, 2010). Principals need a strong sense of confidence in order to support teacher leaders appropriately, and teacher leaders need to have confidence, or be able to build it, so that

they may grow themselves professionally (Helterbran, 2010). Honesty, trust, fairness, and respect have been qualities noted that are valued among teacher leaders. Ghamrawi (2010) highlights that teachers are more willing to trust a teacher leader who displays honesty consistently, as this lends itself to fairness among team circumstances. Additionally, Ghamrawi notes that when the element of trust is present, other teachers tend to feel open and willing to share ideas and express concerns without the fear of rejection.

Effect of the Principal on School Climate

Sagnak (2010) found that among elementary school principals, the transformational leadership style was most prevalent. Sagnak (2010) also concluded that there was a positive relationship between transformational leaders in the elementary school and the ethical school climate. An additional study completed by Pepper and Thomas (2002) affirmed the relationship between principal leadership styles and school climate. That specific study extended a step further into the rippling effects on student achievement (Pepper & Thomas, 2002). The study found that principal leadership style also had an effect on student achievement (Pepper & Thomas, 2002). Leithwood et al., (2004) found based on evidence, that regarding student achievement, the only impact stronger than principal leadership is classroom instruction. Leadership has the second greatest impact (Leithwood et al., 2004). Moolenaar et al. (2010) also noted the positive relationships between transformational characteristics of the principal and teacher perceptions of a positive, open school climate.

Leadership by Gender

Ayman and Korabik (2010) emphasize the role that gender and culture play on leadership. They describe gender as more than ones self-report of biological affiliation. It is “multidimensional” (Ayman & Korabik, 2010, p. 158) as it encompasses stereotypes, gender-

role identity, and the hierarchical status that comes along with gender affiliation. The hierarchical status discussed is one of power and more access to resources, related to the male gender.

Additionally, Ayman and Korabik credit fellow researchers who indicated that gender also pertains to traits, attitudes, and values associated with males or females (Bem, 1993), as well as the way in which individuals interact (Deaux & Major, 1987). Because leaders' own behavior is a determinant of their leadership style and effectiveness, it is important to consider the possible differences between the male and female gender regarding leadership style (Eagly et al., 2003).

Cheung and Halpern (2010) assert that for the first time in the history of the United States, the employment rate of women is about to surpass that of men. The amount of women in higher education is on the rise; in fact, the majority of students enrolled in undergraduate higher education in industrialized countries are female students (Cheung & Halpern, 2010). Eagly and Johnson (1990) compared many gender leadership studies conducted between 1961 and 1987. The findings revealed that the main difference found between genders in leadership was that females were more democratic in allowing shared decision-making, and males were more autocratic (Eagly & Johnson, 1990). Dating back to Burns Transformational Leadership Theory (1978), which emphasized that the most effective leaders inspire followers to go above and beyond the expectations to develop into leaders (Burns, 1978, 1998), Evans (2011) contended that women are especially talented as leaders. Evans (2011) also notes that women make up a large portion of management and professional positions. This could be due, in part, to women's inclination to focus on contingent rewards and less negative actions associated with passive and laissez faire leadership styles (Eagly et al., 2003).

In a study conducted in China by Cheung and Halpern (2010), many women noted that their leadership styles adopted home leadership characteristics of being nurturing, caring,

supportive, and firm when necessary. “Femininity and leadership are no longer considered incompatible” (Cheung & Halpern, 2010, p. 187). Women may be more inclined to exhibit transformational leadership characteristics, as this is one means to help combat the stereotypical leadership qualities of task-oriented, firm nature (Eagly et al., 2003). Females tend to rely heavily on good communication and team building (Cheung & Halpern, 2010).

In a review of literature, Lowe, Kroeck, and Sivasubramaniam (1996) found that transformational leadership has a greater association with effective outcomes than that of transactional leadership. This review also found that women are more likely to employ the transformational leadership style due to their maternal nature. Lowe et al. (1996) assert that if the transformational leadership style is shown to be more effective than transactional, and women employ transformational leadership more than their male counterparts do, it is logical that women – in general – are more effective leaders than men. In another study conducted by Krishnan and Park (2005), researchers sampled over 700 businesses listed in a *Fortune* magazine. This study also found that women comprised the top 6.7% of management teams. Additionally, this study found a significant positive relationship between women leaders and the financial success of the company. While explaining the results, Krishnan and Park (2005) noted that the leadership style variation between women and men is crucial, as women tend to communicate more and share more information about the company so that everyone is privy to the information.

An obstacle facing many women leaders, as opposed to men, is the responsibility for home life and keeping household duties from lagging. In a study conducted by Cheung and Halpern (2010), research was found showing that most women spend more hours in each day concerning themselves with household responsibilities than do the male colleagues (Galinsky,

2005). One of the strategies, noted by Cheung and Halpern (2010), that many females have found successful in balancing work and home is multitasking. In interviews conducted within their study, females noted that they must “make more time” (Cheung & Halpern, 2010, p. 185). In doing this, they noted that it was crucial to establish links between their job at home and their job away from home, thus integrating children and family into work as much as possible, while still maintaining the distinction between their varying roles (Cheung & Halpern, 2010). In one study Baltes and Heydens-Gahir (2003) stated that the way to help weave the two roles of work and home, while maintaining division between the two, was the organizational mindset of “SOC: selection, optimization, and compensation” (p. 1005). Following the philosophy of “SOC” (p. 185), Cheung and Halpern (2010) suggested that articulation of specific goals (selection), multitasking (optimization), and outsourcing or delegating jobs to be done (compensation), were of high priority in order to be successful.

In looking at the overall research conducted on women in leadership, the findings are listed to highlight the importance that gender plays within leadership roles. Yoder (2001) contends that transformational leadership among women may be a helpful method for female leaders to overcome the gender incongruity within leadership roles – that is, the overly masculine impression that the role of hierarchical control in leadership may bring. Cheung and Halpern (2010) note that this understanding of gender in leadership strengthens the attention to interpersonal and relational leadership, as well as highlights the importance of integrating the various domains within a leader’s life. Researchers suggest that by fulfilling family roles of maternal significance, as well as holding leadership positions at work, and integrating these two roles help facilitate the development of the transformational leadership style among women (Cheung & Halpern, 2010).

Emotional Intelligence and Leadership

Leadership has been found to be a highly social function. Gardner et al. (2005) explains that leadership takes place because of the relationship between leaders and followers. The leader's ability to influence followers' actions for overall change in the organization is one factor that determines the leader's effectiveness, while follower trust in the leader is another element of efficacy (Kalshoven & Den Hartog, 2009). Researchers have found that emotional intelligence can be seen as a precursor to transitional leadership (Harms & Crede, 2010; Lim & Ployhart, 2004). To understand the elements of transformational leadership as listed by Avolio and Bass (2004), emotional intelligence and its role in developing the transitional leadership style can be explored.

Additionally, Goleman (2004, p. 1) explains that "truly effective leaders are also distinguished by a high degree of emotional intelligence – which includes self-awareness, self-regulation, motivation, empathy and social skill." Emotional intelligence, as first defined in 1990 by Salovey and Mayer, is "...relevant to the accurate appraisal and expression of emotion in oneself and in others, the effective regulation of emotion in self and others, and the use of feeling to motivate, plan, and achieve in one's life" (p. 185). Broken down, Salovey and Mayer (1990) describe emotions as responses to an internal or external event that interconnect various psychological arenas such as physiological, motivational, cognitive, and experiential systems. These reactions can typically have a positive or negative impact on the person (Salovey & Mayer, 1990).

Research has shown that one of the most popular models of emotional intelligence involves four main components, developed by Salovey and Mayer (1997). The four components build upon each other beginning with identifying emotions, which is the capability of being able

to recognize how you and others are feeling. Next is using emotions to facilitate thought. This is when emotions are produced and are used to aide in logical thinking. The following element is understanding emotions, and this is when one is able to understand how emotions affect each other and the ways that they interact. The final element of the four emotional intelligence branches is managing emotions. This is the capacity to manage one's own emotions, as well as the emotions of others (Mayer & Salovey, 1997). In fact, Druskat and Wolff (2001) examine emotional intelligence from a team perspective and posit that "the most effective teams are emotionally intelligent ones – and that any team can attain emotional intelligence" (p. 90).

Concerning leadership, emotional intelligence has been found to have a significant effect on the transformational leadership processes. Humphrey (2002) states that leadership is an emotional process by which leaders go through each of the four elements described by Mayer and Salovey (1997). First, leaders recognize the emotions of followers and try to conjure emotions for a common goal, and then they seek to manage those emotions as needed. The ability of the leader to influence the emotional climate of followers can strongly impact performance (Humphrey, 2002). George (2000) contends that leaders with a high level of emotional intelligence can stimulate efficiency at all levels within the organization. He also states that emotional intelligence is instrumental in one's level of being socially effective (George, 2000). Specifically, being able to recognize one's own emotions and the emotions of others to help influence behavior and address complications is a key component of emotional intelligence in leadership (Mayer & Salovey, 1997).

In a study conducted by Kerr, Garvin, Heaton, and Boyle (2005) results found that emotional intelligence may be a key determinant of an effective leader, as employees' views of their supervisor's efficacy were strongly related to the emotional intelligence of the

corresponding supervisor. It is noted that emotional intelligence also plays an important role in the significance and efficiency of social interaction with others (House & Aditya, 1997).

Contrary to hypothesized outcomes by Weinberger (2010), all four areas of emotional intelligence had positive correlations with transformational leadership styles, but none with statistical relationships. Other studies have corroborated the finding of having reservations about the interconnectedness of emotional intelligence and transformational leadership styles (Antonakis, Ashkanasy, & Dasborough, 2009; Kroeck, Lowe, & Brown, 2004). However, Caruso and Salovey (2004) contend that it would be difficult to inspire others to achieve higher goals and challenge their thinking without having some level of emotional intelligence as the leader. These specific tasks require elements found within Transformational Leadership – individualized consideration, intellectual inspiration, inspirational motivation, and idealized influence (Avolio & Bass, 2004; Caruso & Salovey, 2004). With this in mind, it is essential to consider the importance of emotions and emotional intelligence, as studies have found positive correlations (Sosik & Megerian, 1999), but perhaps it should not be revered as the most critical component of leadership. When viewed as an antecedent to transformational leadership, (Harms & Crede, 2010; Lim & Ployhart, 2004) the perspective gained when considering emotions and their ability to influence leadership and followers is recognized. Within the outline of transformational leadership, as described by Avolio and Bass (2004), transformational leaders inspire others to go beyond what is expected, while developing leaders from followers (Avolio & Bass, 2004).

Related Studies and Calls for Research

Robinson (2008) notes that a link between leadership and student achievement is missing. She suggests that rather than focusing on the aspect of leadership, perhaps the concept of

followership should be examined. Similarly, this study sought to examine school climate according to leadership styles of teacher leaders rather than school leaders only. A comparable study conducted in Malaysia examined academic department heads at Malaysian research universities to determine their leadership style. Also, the relationship with leadership styles and leadership effectiveness as it relates to the improvement of academics in higher education was a focus of the study (Sadeghi & Pihie, 2012). It was found that academic department heads most often were characterized by transformational and transactional leadership styles, while some occasionally exhibited laissez-faire characteristics (Sadeghi & Pihie, 2012).

Xie (2008) affirmed through her study that a positive relationship exists between teacher leadership and school climate. The author notes that most research in this area is qualitative, and implications are made calling for more quantitative research as well as a deeper examination into the effect of teacher leadership on school climate (Xie, 2008). Additionally, Lim and Ployhart (2004) note that in some studies conducted (Bass, Avolio, Jung, & Berson, 2003; Dvir et al., 2002; Hogan, Curphy, & Hogan, 1994; Judge, Bono, Ilies, & Gerhardt, 2002), it has been found that transformational leadership is most effective at the team level, rather than on an individual basis. Therefore, it is recommended to focus on the team level of transformational leadership (Lim & Ployhart, 2004). The present study sought to explore quantitatively leadership styles of teacher team leaders and its potential effect on elementary school climate.

Summary

While the impacts of distributed leadership, shared governance, and professional learning communities all have been found to build teacher leadership, this study aims to examine if teacher leadership has a positive effect on school climate. York-Barr and Duke (2004) claim that school culture has an impact on teacher leadership, and relationships and structure can be

impacted by school culture. This reciprocal relationship is addressed by Smylie and Denny's (1990) study of relationships between teacher leaders and their colleagues.

Within the two theories addressed in this study – Transformational Leadership Theory (Avolio & Bass, 2004) and Situational Leadership Theory (Hersey & Blanchard, 1976) – there is a cross section in which they intersect. As part of the Four I's of Transformational Leadership outlined by Avolio & Bass (2004), individualized consideration is one of the key components. This element considers each individual as unique, realizing varying levels of development, needs, and concerns and adjusting tasks and expectations to fit that individual. Setting goals and helping the follower to expand their own individual needs to help develop their full potential is an example of transformational leadership (Avolio & Bass, 2004). In the Situational Leadership Theory set forth by Hersey and Blanchard (1976), the leader's ability to recognize the developmental level of the follower is critical. Adjusting the type of direction and support given so that the two levels align is critical, as well. When this is recognized and capitalized upon, characteristics of Transformational Leadership Theory and Situational Leadership Theory intersect (Avolio & Bass, 2004; Hersey & Blanchard, 1976).

In this study, a careful examination into the leadership styles of teacher team leaders was executed and through a precise matching process, the research aimed to determine if the leadership styles of teacher team leader has an effect on the overall school climate as rated by subordinate teachers working under the identified team leaders. This study was supported by Avolio and Bass's (2004) Transformational Leadership Theory, as well as Hersey and Blanchard's (1976) Situational Leadership Theory – both which support the idea of developing leaders from followers through various forms and styles of leadership.

CHAPTER THREE: METHODS

Overview

Two separate instruments, Multifactor Leadership Questionnaire 5X and Organizational Climate Descriptor for Elementary Schools, were administered for this research. Each instrument was administered to a different group of participants, based on their role as a teacher team leader or not. A matching process was used to accurately measure the perceptions of school climate among teachers on a specific team with the leadership dimensions displayed by their teacher team leader. In doing this, the relationship between two constructs – leadership dimensions and school climate – were examined. Multiple regression analysis was used to determine significance of the predictive relationships.

Design

A predictive correlational design was selected for this research. This design was chosen due to the large number of continuous interval variables considered within this study, allowing the researcher to analyze how the combination of variables affect the trend of behavior – or school climate in this study. Additionally, this design method allows an exploration into the degree of the relationships among the variables being studied (Gall, Gall, & Borg, 2007). The predictor variables, leadership dimension scores, are constructs of the three leadership styles. The specific leadership dimensions are as follows: Idealized Influence- Attributed, Idealized Influence-Behavior, Inspirational Motivation, Intellectual Stimulation, Individualized Consideration, Contingent Reward, Management by Exception-Active, Management by Exception-Passive, Laissez Faire and Principal Openness Index. Four criterion variables were measured. They were Collegial Teacher Behavior, Intimate Teacher Behavior, Disengaged Teacher Behavior, and Teacher Openness.

Research Questions

The following research questions guided the current study:

RQ1: How accurately can collegial teacher behavior be predicted from a linear combination of various leadership dimensions (Idealized Influence-Attributed, Idealized Influence-Behavior, Inspirational Motivation, Intellectual Stimulation, Individualized Consideration, Contingent Reward, Management by Exception-Active, Management by Exception-Passive, Laissez Faire, and Principal Openness Index) among teacher team leaders in elementary school?

RQ2: How accurately can intimate teacher behavior be predicted from a linear combination of various leadership dimensions (Idealized Influence-Attributed, Idealized Influence-Behavior, Inspirational Motivation, Intellectual Stimulation, Individualized Consideration, Contingent Reward, Management by Exception-Active, Management by Exception-Passive, Laissez Faire, and Principal Openness Index) among teacher team leaders in elementary school?

RQ3: How accurately can disengaged teacher behavior be predicted from a linear combination of various leadership dimensions (Idealized Influence-Attributed, Idealized Influence-Behavior, Inspirational Motivation, Intellectual Stimulation, Individualized Consideration, Contingent Reward, Management by Exception-Active, Management by Exception-Passive, Laissez Faire, and Principal Openness Index) among teacher team leaders in elementary school?

RQ4: How accurately can teacher openness be predicted from a linear combination of various leadership dimensions (Idealized Influence-Attributed, Idealized Influence-Behavior, Inspirational Motivation, Intellectual Stimulation, Individualized Consideration, Contingent

Reward, Management by Exception-Active, Management by Exception-Passive, Laissez Faire, and Principal Openness Index) among teacher team leaders in elementary school?

Hypotheses

The null hypotheses for this study are:

H₀₁: There will be no significant predictive relationship between collegial behavior and the linear combination of predictor variables (Idealized Influence-Attributed, Idealized Influence-Behavior, Inspirational Motivation, Intellectual Stimulation, Individualized Consideration, Contingent Reward, Management by Exception-Active, Management by Exception-Passive, Laissez Faire, and Principal Openness Index) for teacher team leaders in an elementary school.

H₀₂: There will be no significant predictive relationship between intimate behavior and the linear combination of predictor variables (Idealized Influence-Attributed, Idealized Influence-Behavior, Inspirational Motivation, Intellectual Stimulation, Individualized Consideration, Contingent Reward, Management by Exception-Active, Management by Exception-Passive, Laissez Faire, and Principal Openness Index) for teacher team leaders in an elementary school.

H₀₃: There will be no significant predictive relationship between disengaged behavior and the linear combination of predictor variables Idealized Influence-Attributed, Idealized Influence-Behavior, Inspirational Motivation, Intellectual Stimulation, Individualized Consideration, Contingent Reward, Management by Exception-Active, Management by Exception-Passive, Laissez Faire, and Principal Openness Index) for teacher team leaders in an elementary school.

H₀₄: There will be no significant predictive relationship between teacher openness and the linear combination of predictor variables Idealized Influence-Attributed, Idealized Influence-Behavior, Inspirational Motivation, Intellectual Stimulation, Individualized Consideration, Contingent Reward, Management by Exception-Active, Management by Exception-Passive, Laissez Faire, and Principal Openness Index) for teacher team leaders in an elementary school.

Participants and Setting

Participants

The participants for the study were a convenience sample of elementary school teachers selected from 24 elementary schools located within one school district located in the northern area of metro-Atlanta, Georgia. The school district is comprised of 24 elementary, seven middle schools, six high schools, and one school serves students in seventh through twelfth grades. Overall in the school district, 31.75% of students qualify to receive free or reduced lunch, 14.8% are identified Gifted, 12% are identified as needing special education, and 5.5% of students in this district are English Language Learners.

In order to achieve a sufficient sample size within this study, 10 participating schools were needed to complete the study. Of the participating schools, teacher team leaders first completed the survey. The formation of this group was naturally occurring due to pre-appointed roles of team leaders.

Sample

Ten elementary schools participated in this study, due to the usage of convenience sampling. Of the 24 total schools within the selected school district, 14 schools chose not to participate, leaving the ten participating schools. Of the participating schools, there were 74 teacher team leaders. The formation of this group was naturally occurring due to pre-appointed roles of team leaders. Most of the team leaders were Caucasian with small percentages of minorities represented. Additionally, 72 team leaders were female, with only two being male. The average age of team leaders was 38 years old, and the average years of teaching experience was 14 years. Eighty-two percent of team leaders held an advanced degree – 59% held a Master's degree, 19% held a Specialist's degree, and 4% held a Doctorate degree.

The total sample size of the other teacher participants was 201. Of the participating non-team leading teachers, 182 were Caucasian, 12 were African American, two were Hispanic and small percentages of minorities were represented. Ninety-six percent of teachers were female, with only four percent being males. Ten percent of teachers were between 20-30 years old, thirty-one percent were 31-40 years old, forty-four percent were 41-50 years old, and fifteen percent were older than 50. Regarding teaching experience, fifteen percent had 1-5 years' experience, fourteen percent had 6-10 years' experience, forty-nine percent had 11-20 years' experience, and twenty-two percent had 21-30 years' experience. Seventy-three percent of teachers held an advanced degree – fifty-eight percent held a Master's degree, twelve percent held a Specialist's degree, and three percent held a Doctorate degree.

Instrumentation

Multifactor Leadership Questionnaire

Multifactor Leadership Questionnaire (MLQ 5X) was used to measure the primary leadership dimensions among team leaders (Avolio & Bass, 2004). See Appendix A for a sample of the instrument. Permission to use this instrument was granted upon the purchase of the license for the online version via Transform Survey Hosting from MindGarden.com. See Appendix A for Instrument and license to use. The instrument was developed through research on leadership styles and dimensions, and it uses phrases to describe the specific constructs within three different leadership styles: transformational, transactional, and laissez-faire. The purpose of the instrument is for leadership development and gives an overall leadership dimension score for each of the nine subscales for each leader. The instrument is not designed to categorically label a leader as a specific leadership style, rather it is intended to determine if a leader is “more transformational than the norm” or “less transactional than the norm” (Avolio & Bass, 2004, p.

118). The authors specifically suggest a reading level of ninth-grade and above to successfully complete this 45-question survey (Avolio & Bass, 2004). See Appendix B for online administration instructions for participants. The instrument presents the participant with descriptive statements of frequency or to what degree on a Likert-type scale of 0 to 4, with 0 representing “not at all” and 4 representing “frequently, if not always.”

Scoring of the MLQ 5X was gathered from the Transform Survey Hosting assessment portion that is part of MindGarden’s online version. Responses to items on this survey are as follows: Not at All = 0, Once in a While = 1, Sometimes = 2, Fairly Often = 3, and Frequently, if not Always = 4. Based on the scoring instructions by the authors, specific item numbers were averaged by Transform Survey Hosting, and the subscale with the highest score indicates the leadership dimension is present within the teacher team leaders’ leadership style.

Bass (1985) originally included seven leadership factors: charisma, inspirational, intellectual stimulation, individualized consideration, contingent reward, management-by-exception, and laissez-faire. This instrument has undergone several changes and revisions based on new research as it has become available. Finally, a panel of six scholars in the field of leadership examined items within the MLQ 5X and made suggestions for modifications and eliminations based on the concept of full range leadership. The final version of the MLQ 5X is based upon a six factor leadership model which addresses the full range of leadership from Laissez Faire to Transformational leadership.

The reliability of the instrument ranged from Chronbach’s alpha levels of .63 to .92 in the initial sample set, and in the replication set, it ranged from Chronbach’s alpha levels of .64 to .92 (Avolio & Bass, 2004). Within the instrument are questions that address six different factors of leadership. These factors are designed to measure the various aspects of leadership and

determine which leadership style is the most predominant in the leader. The Cronbach's alpha levels for each factor from the initial sample set are as follows: charisma has a Cronbach's alpha reliability score of .92; intellectual stimulation has a Cronbach's alpha reliability score of .83; individualized consideration has a Cronbach's alpha reliability score of .79; contingent reward has a Cronbach's alpha reliability score of .80; active management by exception has a Cronbach's alpha reliability score of .63; and passive/avoidant has a Cronbach's alpha reliability score of .84. The highest varying areas for disparity between the initial sample set and the replication set was intellectual stimulation which decreased the Cronbach's alpha score from .83 to .78, contingent reward which decreased from the Cronbach's alpha score of .80 to .74, and passive/avoidant which increased Cronbach's alpha score from .84 to .86.

Organizational Climate Description for Elementary Schools

The Organizational Climate Description for Elementary Schools (OCDQ-RE) was used to determine teacher perceptions of the organizational climate at the elementary school level. The instrument consisted of six sub-scales (Collegial Teacher Behavior, Intimate Teacher Behavior, Disengaged Teacher Behavior, Supportive Principal Behavior, Directive Principal Behavior, and Restrictive Principal Behavior). Collegial Teacher Behavior, Intimate Teacher Behavior, and Disengaged Teacher Behavior, as well as Teacher Openness Index were used as the criterion variables. These subscales are all measures of teacher behaviors and interactions. See Appendix C for permission and Appendix D for instrument. The OCDQ-RE was developed through research on school climate and uses descriptive phrases reflecting teacher perception of to what degree, ranked on a Likert-type scale (Hoy, 2005). Responses are as follows: Rarely Occurs = 1, Sometimes Occurs = 2, Often Occurs = 3, Frequently Occurs = 4. The OCDQ-RE consists of 42 total questions divided among the six subscales. Within the Collegial Teacher

Behavior subscale, eight questions are present, and Intimate Teacher Behavior contains seven questions. Lastly, the Disengaged Teacher Behavior subscale consists of four questions.

Participants were assured that their responses would be coded only by their grade level or team for coding purposes, but individual names would be kept confidential. A consent form and demographic questions were given in conjunction with the survey at the faculty meeting. See Appendix E.

The Likert-type scale with scores ranging from one to four represents descriptive statements of belief or to what degree the non-team leader teacher perceives the school climate of his or her own school. Items 6, 31, and 37 were reversely scored, as required by the scoring guidelines outlined by the author of the instrument. The items were grouped by number, according to the scoring instructions from the author (Hoy, 2005), and an average was calculated for each set of items. Six numbers were calculated for each survey, representing the six subscales of the instrument. In this study, three of the subscales – Supportive Principal Behavior, Directive Principal Behavior, and Restrictive Principal Behavior were calculated and used as the Principal Openness Index as part of the linear combination of predictor variables.

The validity of each subscale on this instrument was used by calculating Openness Indices. They were compared with the Openness Index from the original OCDQ-RE in various areas (Hoy, 2013). On this specific instrument, the Teacher Openness Index correlated positively with the General Openness Index ($r = .67, p < .01$), as did the Principal Openness Index ($r = .52, p < .01$). Additionally, the factor analysis supports the construct validity of the Organizational Climate Description for Elementary Schools (Hoy, Trotter, & Kottkamp, 1991). The index of the degree of openness was calculated by determining a standardized score and subtracting the sum of two subscales from the third subscale. For example, subtracting the sum

of Directive and Supportive Behavior scores from the Restrictive Behavior score yields the openness index for Restrictive Behavior of Principals. Hoy (2010) states that all variables on this instrument have been tested and refined for reliability and validity, and they have consistently been found to measure what they are designed to measure

Each of the subscales of the OCDQ-RE was measured by a subtest. The Cronbach's alpha was relatively high for each area. Supportive Behavior yielded a Cronbach's alpha reliability score of .94; Directive Behavior yielded a Cronbach's alpha .88, and Restrictive Behavior yielded a Cronbach's alpha .81 (Hoy, 2013). While these subscales are ones that were controlled (e.g. covariate) for in this study, the high alpha levels are significant in showing the overall reliability of the instrument. The Cronbach reliability levels for the subscales of Collegial Behaviors returned a reliability score of Cronbach's alpha .87, Intimate Behavior returned a reliability score of Cronbach's alpha .83, and Disengaged Behavior returned a reliability score of Cronbach's alpha .78.

Procedures

IRB Approval and Recruiting Participants

To initiate the study, the researcher gained approval from Liberty University's Institutional Review Board (IRB). See Appendix F for IRB approval. Formal consent from the school district superintendent was obtained, as well as a list of email addresses for all elementary school principals within the school district in which the study was conducted. The researcher sent an email polling interest to all 24 elementary school principals in the school district. Within the email to the 24 elementary school principals in the school district, the researcher explained the purpose of the study, the outlined procedures and data collection methods, as well as risks and benefits to participants in line with the IRB guidelines. It also was made clear that

participation on the part of the schools, team leaders, and teachers was voluntary and all responses would remain completely confidential. See Appendix G for the recruitment letter to principals. The only identifying factors were a coding system for the sole purpose of the matching climate surveys with the appropriate team leader's leadership dimensions. Since the initial email was sent to all elementary school principals in the participating district, a random sample was obtained, as research shows that not all schools invited choose to participate (Gall et al., 2007).

Once participating schools were identified, the researcher maintained correspondence with the principal in order to obtain a list of teacher names by grade level or department, with the team leaders' names marked. The researcher followed up with additional schools until ten schools had consented to participate. Once names were gathered, team leader codes were entered onto an Excel spreadsheet to initiate the coding process that would consist of letters and numbers. The code used began with the school's initials, followed by a number unique to each team leader. For example, CES2 would represent a teacher team leader from a school with the initials of CES representing second grade. This code enabled the researcher to match the completed second grade teacher surveys of non-teacher team leaders to the teacher team leader's leadership survey responses.

Data Collection

As soon as the team leaders were all assigned a code with grade level indicated based on information received from each school principal, a cover letter was sent to accompany the MLQ 5X survey being sent out electronically (Appendix B). Similar to the cover letters for principals (Appendix G), the purpose of the study was outlined, and it was stated that participation is voluntary and all information will remain confidential. Additionally, the Consent to Participate

Form was attached. Using Transform Survey-Hosting by MindGarden, a survey was sent out. The survey took about 15 minutes to complete (Avolio & Bass, 2004). Email contact information was entered to insure that each survey was sent to the correct person. Due to the online nature of the survey for team leaders, the letter explained that information could not be retracted once it was submitted, and if the participants started the survey, but are unable to complete it, the researcher would be notified. The time set for completion of the survey was two weeks. The hyperlink for the survey was included, and upon clicking, the participants were taken to Transform Survey-Hosting to complete the online version of the MLQ-5X. The first page was a reiteration of the directions, and participant consent was gained by signing the Consent to Participate form and was returned to the researcher. See Appendix I for consent form. Participants who clicked the link for the survey had the opportunity to complete each question. See Appendix A for a sample of the instrument. Participants were advised to allow fifteen minutes to complete the survey, and they were asked to take the survey when they would be able to do so uninterrupted. It was also repeated that if the survey was started but unable to be completed, the participant was asked to notify the researcher. At any time, the participants were allowed to stop taking the survey and withdraw from the study. Once the surveys were submitted, the researcher used the Transform Survey-Hosting assessment system to obtain the scores from the MLQ 5X.

The second phase of the data collection included the remaining subordinate teachers. This portion of the data collection was done in person, based on the recommendation of the author of the instrument OCDQ-RE (Hoy, 2013). Based on input from each school principal, the researcher arranged a time that she could present the purpose of the study and collect data at the individual school faculty meetings. Enough copies for each non-team leader teacher were made

plus a few extra to allow for mistakes or new additions to the staff since the original list was obtained from the principals. The researcher arrived at each school prior to the start of the faculty meeting, introduced herself to the principal in the location of the meeting. Once introduced by the principal, the researcher explained the purpose of the study and explained the purpose of the teacher team leaders' data collection, as well. At that time, the researcher also reminded team leaders about the online nature of the survey and had additional consent forms available in the event that additional teacher team leaders desired to participate in the MLQ5X.

The researcher explained that team leaders were exempt from the climate survey, as they had been provided an opportunity to complete the leadership survey. The researcher made the decision for each participant to only complete one survey to avoid a repeated measures effect. In addressing other teachers, the researcher explained that participation was voluntary and that all information would be kept confidential. Participants signed consent forms and the researcher collected them. See Appendix E for consent form and demographic questions. The researcher gave the directions of the survey, along with the mention of the demographic information attached to the survey. See Appendix E for demographic information requested. Participants were asked to complete the entire survey and all demographic questions to the best of their ability. The researcher passed out surveys and pens to all who agreed to participate in the study, and as non-team leaders take the survey, the researcher walked around with a clipboard taking notes regarding observations during the survey. Some teachers were very pensive in completing the survey, while others marked answers more hastily. As participants came to questions they were unsure about, many asked for clarification or for the meaning of the word "autocratic" which was used in one of the statements.

Once all data were collected from each individual school, surveys were scored by the researcher and sorted according to grade level assignment in order to be matched with their corresponding team leader's leadership style survey.

Data Analysis

In order to answer the research question, the researcher examined the results of each subscale of the MLQ 5X as well as all subscales of the OCDQ-RE using a multiple regression analysis. This data analysis method was chosen due to the continuous interval data yielded from both instruments (Leech, Barrett, & Morgan, 2005). While the MLQ 5X identified leadership dimension scores displayed among each teacher leader, the OCDQ-RE has six subscales. The subscales are combined into two indexes to reflect principal and teacher behaviors, thus indicating specific aspects of the school climate. The researcher chose multiple regression analysis to determine if any significant relationships existed between teacher team leaders' leadership styles and school climate. This was examined by using four linear regression models. Scoring of the MLQ 5X was obtained from Transform Survey Hosting, and the OCDQ-RE was scored by the researcher. SPSS® software was used for data analysis.

As outlined in the Instrumentation section, the researcher used two surveys. First, the only the teacher team leaders received the MLQ 5X to assess leadership dimensions and obtain leadership dimension scores. Then, the other teachers in participating schools who are not teacher team leaders received the OCDQ-RE. This instrument has six subscales – three of them pertain to principal behaviors (composite of Supportive Principal Behaviors, Restrictive Principal Behaviors, and Directive Principal Behaviors) and the other three subscales pertain to teacher behaviors (Collegial Teacher Behaviors, Intimate Teacher Behaviors, and Disengaged Teacher Behaviors). The three subscales pertaining to teacher behaviors combine into one index

called the Teacher Openness Index, and the three subscales pertaining to the principal behaviors combine into one index called the Principal Openness Index. This study examined the Teacher Openness Index in addition to the separate teacher subscales – Collegial Teacher Behaviors, Intimate Teacher Behaviors, and Disengaged Teacher Behaviors as the criterion variables. The Principal Openness Index was used in conjunction with the nine leadership dimensions obtained from the MLQ-5X as a predictor variable.

Prior to analyzing any data, the researcher conducted several assumption tests based on the nature of the multiple regression model. After all coding was completed and all data were entered into SPSS®, the data was screened for data errors and inconsistencies. The assumption of normality was assessed through scatterplot matrices in order to visually assess multivariate normal distribution as well as the presence of any bivariate outliers. The assumption of absence of multicollinearity was conducted in order to ensure that predictor variables are not highly correlated with one another. This was especially important with the large number of predictor variables included in this study. This assumption was assessed using Variable Inflation Factor (VIF) and tolerance levels.

Once all of the researcher completed and analyzed all assumption testing, an ANOVA table was used to determine whether the predictive model was statistically significant. Following this initial analysis, the researcher used Regression Model Coefficients to test each null hypothesis that there is no significant predictive relationship between the specific criterion variable and the linear combination of the predictor variables. The significance level of $p < .05$ was set as the level of significance, determining the failing to reject or rejection of the null hypotheses. This level is commonly used in educational research (Gall et al., 2007).

CHAPTER FOUR: FINDINGS

Overview

Upon data collection and analysis using Multiple Regression analysis, research questions and hypotheses were addressed by rejecting the null hypotheses or failing to reject the null hypotheses. Among the four models that were examined - based on the four criterion variables (Collegial Teacher Behavior, Intimate Teacher Behavior, Disengaged Teacher Behavior and Teacher Openness Index), two models were found to be significant and two were found to not be significant. Regression Model Coefficients were used to test the significance of predictive relationships between each of the criterion variables (Collegial Teacher Behavior, Intimate Teacher Behavior, Disengaged Teacher Behavior and Teacher Openness Index) and the linear combination of the predictor variables (Idealized Influence-Attributed, Idealized Influence-Behavior, Inspirational Motivation, Intellectual Stimulation, Individualized Consideration, Contingent Reward, Management by Exception-Active, Management by Exception-Passive, Laissez Faire, and Principal Openness) among elementary schools. This showed that there was overall significance within the models of Disengaged Teacher Behavior, ($p = 0.005$) and Teacher Openness Index ($p = .008$). The individual predictor variable that showed significance among the regression models was Principal Openness Index.

Research Questions

The following research questions guided the current study:

RQ1: How accurately can collegial teacher behavior be predicted from a linear combination of various leadership dimensions (Idealized Influence-Attributed, Idealized Influence-Behavior, Inspirational Motivation, Intellectual Stimulation, Individualized Consideration, Contingent Reward, Management by Exception-Active, Management by

Exception-Passive, Laissez Faire, and Principal Openness Index) among teacher team leaders in elementary school?

RQ2: How accurately can intimate teacher behavior be predicted from a linear combination of various leadership dimensions (Idealized Influence-Attributed, Idealized Influence-Behavior, Inspirational Motivation, Intellectual Stimulation, Individualized Consideration, Contingent Reward, Management by Exception-Active, Management by Exception-Passive, Laissez Faire, and Principal Openness Index) among teacher team leaders in elementary school?

RQ3: How accurately can disengaged teacher behavior be predicted from a linear combination of various leadership dimensions (Idealized Influence-Attributed, Idealized Influence-Behavior, Inspirational Motivation, Intellectual Stimulation, Individualized Consideration, Contingent Reward, Management by Exception-Active, Management by Exception-Passive, Laissez Faire, and Principal Openness Index) among teacher team leaders in elementary school?

RQ4: How accurately can teacher openness be predicted from a linear combination of various leadership dimensions (Idealized Influence-Attributed, Idealized Influence-Behavior, Inspirational Motivation, Intellectual Stimulation, Individualized Consideration, Contingent Reward, Management by Exception-Active, Management by Exception-Passive, Laissez Faire, and Principal Openness Index) among teacher team leaders in elementary school?

Null Hypotheses

The null hypotheses for this study are:

H₀1: There will be no significant predictive relationship between collegial behavior and the linear combination of predictor variables ((Idealized Influence-Attributed, Idealized Influence-Behavior, Inspirational Motivation, Intellectual Stimulation, Individualized Consideration,

Contingent Reward, Management by Exception-Active, Management by Exception-Passive, Laissez Faire, and Principal Openness Index) for teacher team leaders in an elementary school.

H₀₂: There will be no significant predictive relationship between intimate behavior and the linear combination of predictor variables (Idealized Influence-Attributed, Idealized Influence-Behavior, Inspirational Motivation, Intellectual Stimulation, Individualized Consideration, Contingent Reward, Management by Exception-Active, Management by Exception-Passive, Laissez Faire, and Principal Openness Index) for teacher team leaders in an elementary school.

H₀₃: There will be no significant predictive relationship between disengaged behavior and the linear combination of predictor variables (Idealized Influence-Attributed, Idealized Influence-Behavior, Inspirational Motivation, Intellectual Stimulation, Individualized Consideration, Contingent Reward, Management by Exception-Active, Management by Exception-Passive, Laissez Faire, and Principal Openness Index) for teacher team leaders in an elementary school.

H₀₄: There will be no significant predictive relationship between teacher openness and the linear combination of predictor variables (Idealized Influence-Attributed, Idealized Influence-Behavior, Inspirational Motivation, Intellectual Stimulation, Individualized Consideration, Contingent Reward, Management by Exception-Active, Management by Exception-Passive, Laissez Faire, and Principal Openness Index) for teacher team leaders in an elementary school.

Descriptive Statistics

Data was collected on four criterion variables: Collegial Teacher Behavior, Intimate Teacher Behavior, Disengaged Teacher Behavior and Teacher Openness Index and the predictor variables: Idealized Influence-Attributed, Idealized Influence-Behavior, Inspirational Motivation, Intellectual Stimulation, Individualized Consideration, Contingent Reward, Management by Exception-Active, Management by Exception-Passive, Laissez Faire, and Principal Openness Index. Table 1 below shows the data obtained.

Table 1

Descriptive Statistics

Variables	Mean	Std. Deviation	N
Idealized Influence: Attributed	3.03	.57	63
Idealized Influence: Behavior	3.20	.52	63
Inspirational Motivation	3.22	.55	63
Intellectual Stimulation	3.13	.52	63
Individualized Consideration	3.52	.42	63
Contingent Reward	3.07	.58	63
Management by Exception: Active	1.22	.80	63
Management by Exception: Passive	.84	.63	63
Laissez Faire	.48	.53	63
Principal Openness Index	599.68	85.66	63
Collegial Teacher Behavior	25.92	2.45	63
Intimate Teacher Behavior	20.14	3.18	63
Disengaged Teacher Behavior	6.16	1.46	63
Teacher Openness Index	601.95	94.92	63

Results**Data Screening**

Before data analysis occurred, screening of data was conducted on each pairing of variables (criterion variable to each predictor variable and each predictor to all other predictor variables) to identify errors or inconsistencies. None were found.

Assumptions

Scatterplots were used to test for the assumptions of bivariate outliers and multivariate normal distribution. The assumption of bivariate outliers was met, as no extreme outliers were found. The assumption of normal distribution was also met as the resulting scatterplots had cigar-like appearances. See Figures 1 – 4 below for matrices of scatterplots.

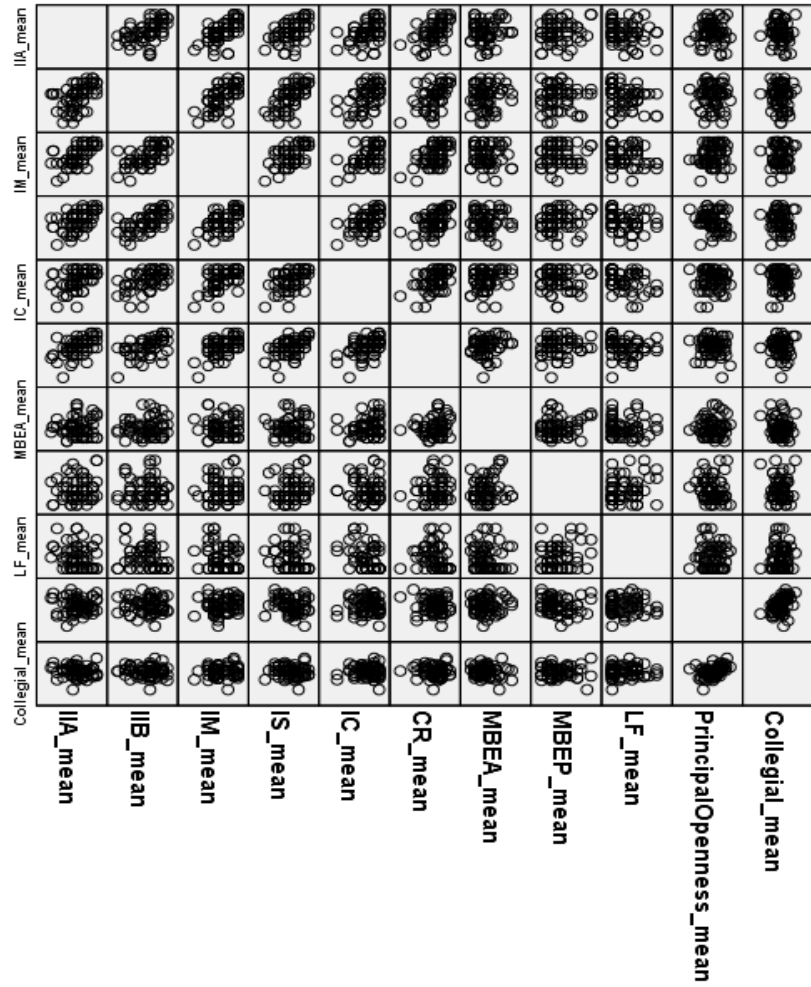


Figure 1. Scatterplot matrix for the assumptions of bivariate and multivariate normal distribution for Collegial Teacher Behavior.

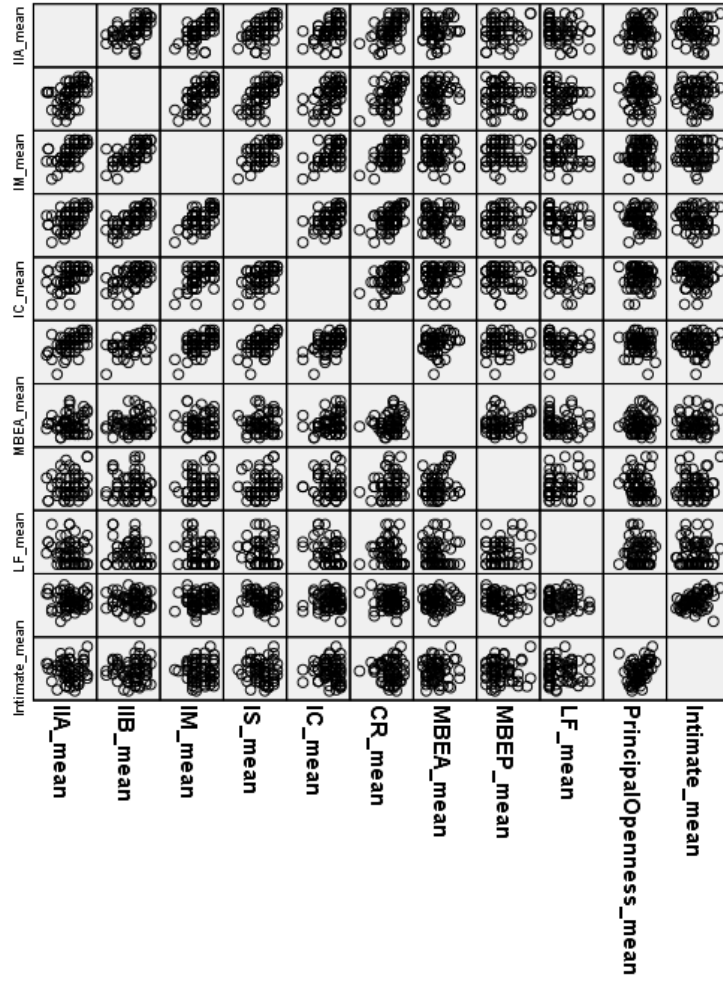


Figure 2. Scatterplot matrix for the assumptions of bivariate and multivariate normal distribution for Intimate Teacher Behavior.

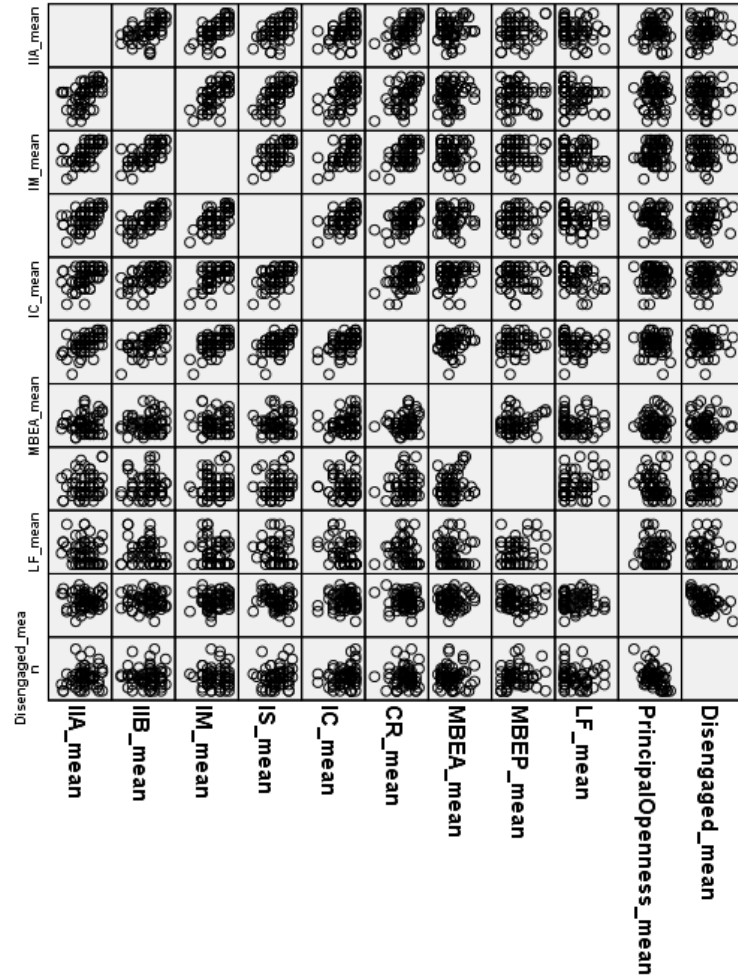


Figure 3. Scatterplot matrix for the assumptions of bivariate and multivariate normal distribution for Disengaged Teacher Behavior.

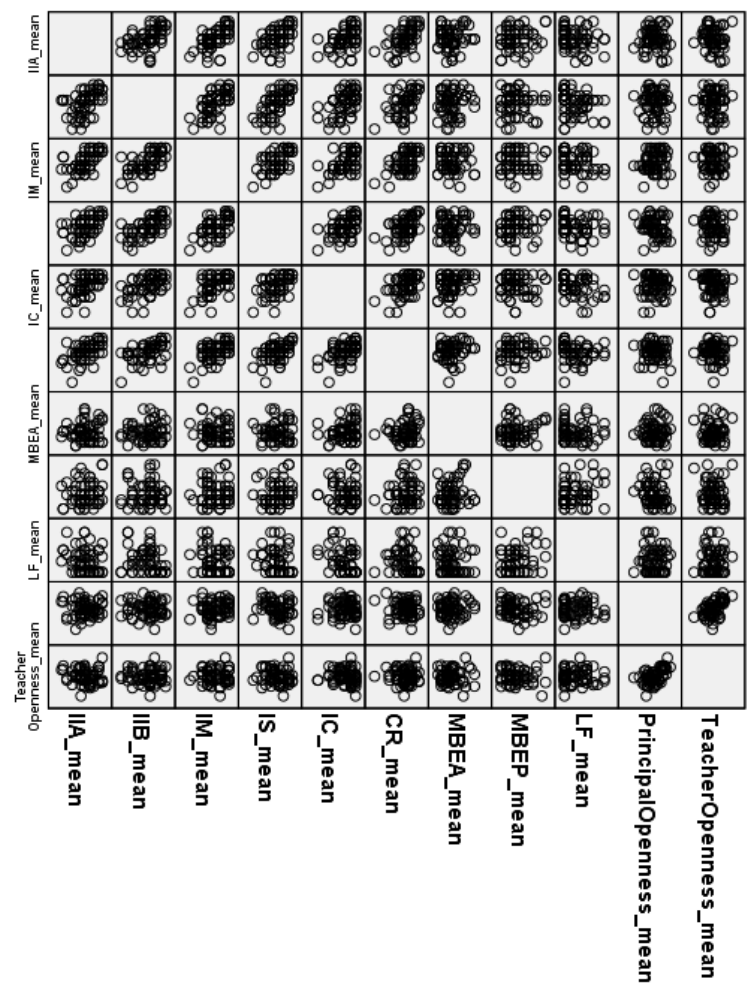


Figure 4. Scatterplot matrix for the assumptions of bivariate and multivariate normal distribution for Teacher Openness Index.

The Variance Inflation Factor (VIF) determined the absence of multicollinearity among the predictor variables. The assumption of non-multicollinearity was met for all predictor variables as all VIF results were between one and five. See Table 2 for VIF results.

Table 2

Collinearity Diagnostic

Coefficients			
Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	Idealized Influence: Attributed	.522	1.917
	Idealized Influence: Behavior	.413	2.421
	Inspirational Motivation	.337	2.967
	Intellectual Stimulation	.433	2.308
	Individualized Consideration	.508	1.970
	Contingent Reward	.571	1.751
	Management by Exception: Active	.802	1.247
	Management by Exception: Passive	.759	1.317
	Laissez Faire	.779	1.284
	Principal Openness Index	.781	1.280

Note. Dependent Variable: Collegial teacher behavior as part of school climate

Results for Null Hypothesis One

Null hypothesis one examined the relationship between collegial teacher behavior and the linear combination of the predictor variables. A multiple linear regression analysis was conducted to evaluate the prediction of Collegial Teacher Behavior, a subscale of school climate from multiple predictors (Idealized Influence-Attributed, Idealized Influence-Behavior, Inspirational Motivation, Intellectual Stimulation, Individualized Consideration, Contingent Reward, Management by Exception-Active, Management by Exception-Passive, Laissez Faire, and Principal Openness) among elementary schools. The null hypothesis was tested at the 95% confidence level. The ANOVA table was used to determine whether the predictive model was statistically significant. The results showed the model was not significant, $F(10, 52) = 1.97, p = .06$. The results of the ANOVA are listed in Table 3.

Table 3

ANOVA Table

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	101.718	10	10.172	1.966	.057 ^b
	Residual	269.033	52	5.174		
	Total	370.751	62			
<i>Note.</i> Dependent Variable: Collegial teacher behavior						
^b Predictors: (Constant), Principal Openness, Laissez Faire, Management by Exception: Active, Management by Exception: Passive, Idealized Influence: Attributed, Idealized Influence: Behavior, Individualized Consideration, Contingent Reward, Intellectual Stimulation, Inspirational Motivation						

The Regression Model Coefficients were used to test the null hypothesis that there is no significant predictive relationship between the criterion variable (Collegial Teacher Behavior) and the linear combination of the predictor variables (Idealized Influence-Attributed, Idealized Influence-Behavior, Inspirational Motivation, Intellectual Stimulation, Individualized Consideration, Contingent Reward, Management by Exception-Active, Management by Exception-Passive, Laissez Faire, and Principal Openness) among elementary schools. Even though the Multiple Regression Coefficients showed that Principal Openness was found to be significant and the best predictor of Collegial Teacher Behavior, $p = .001$, this statistic may be due to a Type I error that occurs when repeated multiple comparisons are involved. Thus, the researcher did not find the model to be significant and failed to reject the null. See Table 4 below for Regression Model Coefficients.

Table 4

Multiple Regression Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	18.031	3.828		4.711	.000
	Idealized Influence: Attributed	-.945	.707	-.219	-1.336	.187
	Idealized Influence: Behavior	-.927	.864	-.197	-1.073	.288
	Inspirational Motivation	.420	.908	.094	.463	.645
	Intellectual Stimulation	.749	.844	.159	.887	.379
	Individualized Consideration	.081	.958	.014	.084	.933
	Contingent Reward	.534	.659	.127	.810	.421
	Management by Exception: Active	-.439	.405	-.143	-1.084	.283
	Management by Exception: Passive	.089	.522	.023	.170	.865
	Laissez Faire	.152	.617	.033	.247	.806
	Principal Openness Index	.014	.004	.496	3.709	.001
<i>Note.</i> Dependent Variable: Collegial Teacher Behavior						

Results for Null Hypothesis Two

Null hypothesis two examined the relationship between Intimate Teacher Behavior and the linear combination of the predictor variables. A multiple linear regression analysis was conducted to evaluate the prediction of Intimate Teacher Behavior, a subscale of school climate from multiple predictors (Idealized Influence-Attributed, Idealized Influence-Behavior, Inspirational Motivation, Intellectual Stimulation, Individualized Consideration, Contingent Reward, Management by Exception-Active, Management by Exception-Passive, Laissez Faire, and Principal Openness) among elementary schools. The null hypothesis was tested at the 95% confidence level. The ANOVA table was used to determine whether the predictive model was

statistically significant. The results showed the model was not significant, $F(10, 52) = 1.12, p = .37$. The results of the ANOVA are listed in Table 5.

Table 5

ANOVA Table

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	110.792	10	11.079	1.116	.368 ^b
	Residual	516.258	52	9.928		
	Total	627.050	62			
<i>Note.</i> Dependent Variable: Intimate Teacher Behavior						
^b Predictors: (Constant), Principal Openness, Laissez Faire, Management by Exception-Active, Management by Exception-Passive, Idealized Influence-Attributed, Idealized Influence-Behavior, Individualized Consideration, Contingent Reward, Intellectual Stimulation, Inspirational Motivation						

The Regression Model Coefficients were used to test the null hypothesis that there is no significant predictive relationship between the criterion variable (Intimate Teacher Behavior) and the linear combination of the predictor variables (Idealized Influence-Attributed, Idealized Influence-Behavior, Inspirational Motivation, Intellectual Stimulation, Individualized Consideration, Contingent Reward, Management by Exception-Active, Management by Exception-Passive, Laissez Faire, and Principal Openness) among elementary schools. Even though the Multiple Regression Coefficients showed that Principal Openness was found to be significant and the best predictor of Intimate Teacher Behavior, $p = .005$, this statistic may be due to a Type I error that occurs when repeated multiple comparisons are involved. Thus, the researcher did not find the model to be significant and failed to reject the null. See Table 6 below for Regression Model Coefficients.

Table 6

Multiple Regression Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	13.093	5.303		2.469	.017
	Idealized Influence-Attributed	-.157	.980	-.028	-.161	.873
	Idealized Influence-Behavior	.416	1.197	.068	.348	.730
	Inspirational Motivation	-.292	1.257	-.050	-.232	.817
	Intellectual Stimulation	.109	1.169	.018	.093	.926
	Individualized Consideration	-1.030	1.327	-.137	-.777	.441
	Contingent Reward	.220	.913	.040	.241	.811
	Management by Exception-Active	.213	.560	.053	.380	.705
	Management by Exception- Passive	.496	.723	.099	.686	.496
	Laissez Faire	-.302	.854	-.050	-.354	.725
	Principal Openness Index	.015	.005	.414	2.907	.005
<i>Note.</i> Dependent Variable: Intimate Teacher Behavior						

Results for Null Hypothesis Three

Null hypothesis three examined the relationship between Disengaged Teacher Behavior and the linear combination of the predictor variables. A multiple linear regression analysis was conducted to evaluate the prediction of Disengaged Teacher Behavior, a subscale of school climate from multiple predictors (Idealized Influence-Attributed, Idealized Influence-Behavior, Inspirational Motivation, Intellectual Stimulation, Individualized Consideration, Contingent Reward, Management by Exception-Active, Management by Exception-Passive, Laissez Faire, and Principal Openness) among elementary schools. The null hypothesis was tested at the 95%

confidence level. The ANOVA table was used to determine whether the predictive model was statistically significant. The results showed the model was significant, $F(10, 52) = 3.00$, $p = .005$ value is less than .05. The results of the ANOVA are listed in Table 7.

Table 7

ANOVA Table

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	48.532	10	4.853	3.000	.005 ^b
	Residual	84.124	52	1.618		
	Total	132.656	62			
<p><i>Note.</i> Dependent Variable: Disengaged Teacher Behavior</p> <p>^bPredictors: (Constant), Principal Openness, Laissez Faire, Management by Exception-Active, Management by Exception-Passive, Idealized Influence-Attributed, Idealized Influence-Behavior, Individualized Consideration, Contingent Reward, Intellectual Stimulation, Inspirational Motivation</p>						

The Regression Model Coefficients were used to test the null hypothesis that there is no significant predictive relationship between the criterion variable (Disengaged Teacher Behavior) and the linear combination of the predictor variables (Idealized Influence-Attributed, Idealized Influence-Behavior, Inspirational Motivation, Intellectual Stimulation, Individualized Consideration, Contingent Reward, Management by Exception-Active, Management by Exception-Passive, Laissez Faire, and Principal Openness) among elementary schools. The Multiple Regression Coefficients showed that Principal Openness was found to be significant and the best predictor of Disengaged Teacher Behavior, $p < 0.001$. Thus, the researcher found the model to be significant and rejected the null. See Table 8 below for Regression Model Coefficients.

Table 8

Multiple Regression Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	9.087	2.140		4.245	.000
	Idealized Influence-Attributed	.650	.396	.251	1.642	.107
	Idealized Influence-Behavior	-.330	.483	-.117	-.682	.498
	Inspirational Motivation	-.218	.508	-.082	-.430	.669
	Intellectual Stimulation	-.067	.472	-.024	-.143	.887
	Individualized Consideration	1.015	.536	.294	1.896	.063
	Contingent Reward	-.485	.368	-.192	-1.315	.194
	Management by Exception-Active	-.028	.226	-.015	-.124	.902
	Management by Exception- Passive	.231	.292	.100	.790	.433
	Laissez Faire	-.068	.345	-.025	-.198	.843
	Principal Openness Index	-.009	.002	-.503	-4.027	.000
	<i>Note.</i> Dependent Variable: Disengaged Teacher Behavior					

Results for Null Hypothesis Four

Null hypothesis four examined the relationship between Teacher Openness Index and the linear combination of the predictor variables. A multiple linear regression analysis was conducted to evaluate the prediction of Teacher Openness Index, an overall combination of three subscales of school climate from multiple predictors (Idealized Influence-Attributed, Idealized Influence-Behavior, Inspirational Motivation, Intellectual Stimulation, Individualized Consideration, Contingent Reward, Management by Exception: Active, Management by Exception: Passive, Laissez Faire, and Principal Openness) among elementary schools. The null

hypothesis was tested at the 95% confidence level. The ANOVA table was used to determine whether the predictive model was statistically significant. The results showed the model was significant, $F(10, 52) = 2.80$, $p = 0.008$ value is less than .05. The results of the ANOVA are listed in Table 9.

Table 9

ANOVA Table

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	195456.881	10	19545.688	2.799	.008 ^b
	Residual	363150.846	52	6983.670		
	Total	558607.726	62			
<i>Note.</i> Dependent Variable: Teacher Openness Index ^b Predictors: (Constant), Principal Openness, Laissez Faire, Management by Exception-Active, Management by Exception-Passive, Idealized Influence-Attributed, Idealized Influence-Behavior, Individualized Consideration, Contingent Reward, Intellectual Stimulation, Inspirational Motivation						

The Regression Model Coefficients were used to test the null hypothesis that there is no significant predictive relationship between the criterion variable (Teacher Openness Index) and the linear combination of the predictor variables (Idealized Influence-Attributed, Idealized Influence-Behavior, Inspirational Motivation, Intellectual Stimulation, Individualized Consideration, Contingent Reward, Management by Exception-Active, Management by Exception-Passive, Laissez Faire, and Principal Openness) among elementary schools. The Multiple Regression Coefficients showed that Principal Openness was found to be significant and the best predictor of Teacher Openness Index, $p < 0.001$. Thus, the researcher found the model to be significant and rejected the null. See Table 10 below for Regression Model Coefficients.

Table 10

Multiple Regression Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	316.884	140.637		2.253	.028
	Idealized Influence-Attributed	-31.349	25.993	-.187	-1.206	.233
	Idealized Influence-Behavior	3.709	31.736	.020	.117	.907
	Inspirational Motivation	6.429	33.349	.037	.193	.848
	Intellectual Stimulation	12.756	30.999	.070	.412	.682
	Individualized Consideration	-41.913	35.185	-.187	-1.191	.239
	Contingent Reward	22.865	24.208	.140	.945	.349
	Management by Exception-Active	-1.376	14.865	-.012	-.093	.927
	Management by Exception- Passive	2.721	19.166	.018	.142	.888
	Laissez Faire	-1.010	22.658	-.006	-.045	.965
	Principal Openness Index	.642	.140	.579	4.580	.000
<i>Note.</i> Dependent Variable: Teacher Openness Index						

In conclusion, the researcher used the Regression Model Coefficients to test the significance of predictive relationships between each of the criterion variables (Collegial Teacher Behavior, Intimate Teacher Behavior, Disengaged Teacher Behavior and Teacher Openness Index) and the linear combination of the predictor variables (Idealized Influence-Attributed, Idealized Influence-Behavior, Inspirational Motivation, Intellectual Stimulation, Individualized Consideration, Contingent Reward, Management by Exception-Active, Management by Exception-Passive, Laissez Faire, and Principal Openness) among elementary schools showed that there was overall significance within the models of Disengaged Teacher Behavior, ($p =$

0.005) and Teacher Openness Index ($p = .008$). The individual predictor variable that showed significance among the regression models was Principal Openness Index.

CHAPTER FIVE: CONCLUSIONS

Overview

A positive school climate has an enormous effect on student motivation, self-actualization, empowerment, and engagement – which all lead to increased student achievement (Hughes & Pickeral, 2013). The National School Climate Center (2014) notes that school climate has four main areas of focus - safety, relationships (among students, among students and teachers, and among teachers and parents), teaching and learning, and the overall school environment. Gottfredson and Hollifield (1988) contend that school climate is the primary factor of importance in whether a school succeeds with its students. One direct impact on school climate is leadership (The Wallace Foundation, 2012). Within this study, the researcher examined the predictive correlational relationship between the leadership dimensions of teacher team leaders and elementary school climate and found two out of the four analysis models significant; they were Disengaged Teacher Behavior and Teacher Openness Index. Although a statistically significant relationship was not found between the two studied constructs in all four analysis models, the insight that was gained through this research was beneficial in that it can be used to examine the reason for non-significant relationships in the area of Collegial Teacher Behavior and Intimate Teacher Behavior.

Discussion

The purpose of this predictive correlational study was to determine if there is a relationship between teacher team leaders' leadership dimensions and elementary school climate. The overall analysis incorporating all criterion variables (Collegial Teacher Behavior, Intimate Teacher Behavior, Disengaged Teacher Behavior and Teacher Openness Index) and the linear combination of predictor variables (Idealized Influence-Attributed, Idealized Influence-Behavior,

Inspirational Motivation, Intellectual Stimulation, Individualized Consideration, Contingent Reward, Management by Exception-Active, Management by Exception-Passive, Laissez Faire, and Principal Openness) indicated that there was significance only in the models addressing Disengaged Teacher Behavior and Teacher Openness Index. The researcher did not find significant relationships were found within the models of Collegial Teacher Behavior or Intimate Teacher Behavior.

Within the analysis model, one of the criterion variables identified to have any significant relationship with the linear combination of the predictor variables was Disengaged Teacher Behavior. This relationship was significant with a p value of $p = 0.005$, indicating that leadership dimensions have a significant effect on school climate in the area of Disengaged Teacher Behavior. Hoy (2005) defined Disengaged Teacher Behavior as, “lack of meaning and focus to professional activities. Teachers are simply putting in time in non-productive group efforts; they have no common goals. In fact, their behavior is often negative and critical of their colleagues and the school” (para. 1).

Additionally, the other criterion variable identified to have any significant relationship with the linear combination of the predictor variables was Teacher Openness Index. This relationship was significant with a p value of $p = 0.008$, indicating that leadership dimensions have a significant effect on school climate in the area of the Teacher Openness Index, a combination of the three teacher behavior subscales. This index is explained by Hoy (2005) as, “defining the degree of openness among teachers,” looking at teacher-to-teacher relationships (para. 4). As this model was examined, the researcher rejects the null and further supports the existing body of knowledge that open teacher-to-teacher relationships, or the degree of teacher

openness, is significantly related to leadership dimensions (Hoy & Tarter, 1997; Hoy et al., 1991).

Prior studies examined the significant relationships that principals have on school climate, specifically in terms of student achievement (Pepper & Thomas, 2002) and overall school climate (Leithwood et al., 2004). Moolenaar et al. (2010) also noted the positive relationships between transformational characteristics of the principal and teacher perceptions of a positive, open school climate. Within the population of participants, these findings were corroborated as the principal behaviors were included through Principal Openness Index among the predictor variables, and this single variable had the highest significance among each of the four models.

Conclusion

Studies indicated that the school principal has a strong effect on many aspects of school climate, student achievement, attendance, and other areas (Leithwood et al., 2004; Moolenaar et al., 2010; Pepper & Thomas, 2002). Due to these findings, the principal behaviors were included in this study through the Principal Openness Index, which was one of the predictor variables. In examining individual predictor variables, each analysis model indicated a significant relationship between Principal Openness Index and each of the criterion variables (Collegial Teacher Behavior, Intimate Teacher Behavior, Disengaged Teacher Behavior and Teacher Openness Index). This relationship is in alignment with the existing body of research (Leithwood et al., 2004; Moolenaar et al., 2010; Pepper & Thomas, 2002).

Considering non-significant relationships that were discovered, teachers who completed the Organizational Climate Descriptor for Elementary Schools responded to items relating to the overall school climate. This study focused on the relationship of teacher team leaders'

leadership styles and school climate; however, it is plausible that non-significant relationships appeared due to participants' perceptions being strongly influenced by overall school leadership. It is also plausible that the impact of the teacher team leaders' leadership dimensions are not strong enough to cause a change in perception in the overall school climate.

In examining the results of the study, it is important to note that the principal establishes the school climate and is firmly rooted, not affected by the leadership dimensions of teacher team leaders. In the county in which this research was conducted, a new form of job-embedded professional development is being launched. The new professional development format will take place through Professional Learning Communities (PLC's). To support this initiative, principals appointed a teacher leader at each local school – elementary, middle, and high schools – to be the Professional Learning Teacher Leader (PLTL). In terms of this research, it is important to note that the leadership dimensions of teacher team leaders did not reveal a significant relationship within all models of school climate. Regarding the PLCs at each local school, this study's findings support the role of the PLTL as a facilitating leader, without jeopardizing the established school climate.

Findings that show teacher team leaders' leadership dimensions do not have a significant relationship among all four models of school climate studied, and suggests that having this PLTL in place may not have a significant relationship with the school climate. Principals can apply this information in further corroborating the importance of the impact at the principal level rather than this impact resting with teacher leaders, including the PLTL, as well as facilitators of Professional Learning Communities. The results of this study showing that there are no significant relationships between teacher team leaders' leadership dimensions and Collegial Teacher Behavior and Intimate Teacher Behavior could potentially allow the principal to

consider expanding leadership capacity of teachers within their school building and maintaining the climate that they have helped establish as principal.

A final consideration in examining the results of this study begs to question of the role of teacher team leaders. Teacher team leaders, as defined previously, are teachers who the school's administration appoints to serve as the liaison between administration and classroom teachers. They are the appointed leader of their department or team. Teacher team leaders serve an important role in correctly transmitting information and making team decisions appropriately. In a study conducted by Margolis and Doring (2012) regarding teacher leaders working to lead by modeling lessons within their own school, it was found that there was less synergy between "teacher" and "leader" among these teacher leaders than expected. The results showing less of a matrix between teacher and leader from Margolis and Doring (2012) are similar to the findings of this study in which two of the four models showed no significant relationship between teacher team leadership dimensions and school climate. In a study conducted by Feeney (2009), teacher leaders described their own perception of their role as a leader using words such as "liaison, manager, enforcer, supplier, fixer, department representative, advocate, communicator, and mediator" (p. 215). To this end, perhaps teacher team leaders are appointed by school administrators to serve in more of a liaison role as described by Feeney's study rather than a strong enough leadership role to impact school climate.

While significant predictive relationships were found between teacher team leaders' leadership dimensions and Disengaged Teacher Behavior and Teacher Openness Index, it is important to note the non-significant predictive relationships found between teacher team leaders' leadership dimensions and Collegial Teacher Behavior and Intimate Teacher Behavior, as well as the role of teacher team leaders within this study.

Implications

The scope of this study was examining the relationship between the leadership dimensions of teacher team leaders and school climate. While the analysis models showed two out of four significant predictive relationships (Disengaged Teacher Behavior and Teacher Openness Index), and the other two models as non-significant (Collegial Teacher Behavior and Intimate Teacher Behavior), this study adds to the existing body of knowledge in two ways. The first addition to the current body of knowledge is the corroboration of the principal effect on school climate. While previous studies have found this to be true (Leithwood et al., 2004; Moolenaar et al., 2010; Pepper & Thomas, 2002), the researcher used the Principal Openness as part of the linear combination of predictor variables. Each of the four analysis models picked up a highly significant predictive relationship with the subscales of school climate. The researcher observed this significant relationship to be of importance.

The second addition to the existing body of knowledge regarding leadership's dimensions and school climate is through the non-significant relationships that were found among teacher team leaders' leadership dimensions and subscales of elementary school climate (Collegial Teacher Behavior and Intimate Teacher Behavior). In analyzing the statistically non-significant relationships, the researcher looked beyond the statistical numbers and more into the issue of why there was not a statistical predictive relationship. The researcher identified possibilities that include the role of the teacher team leader in terms of being a leader or liaison, the rotation of different teachers into the leadership role of teacher team leader, and the lack of time needed to have an effect on school climate, as well as the possibility that teacher team leaders may have a limited impact on school climate, but perhaps not enough to create a statistically significant effect. In all, the non-significant relationships of teacher team leaders' leadership dimensions

allow principals to grow teachers by allowing them to serve as a teacher team leader and explore the responsibilities of the leadership role without the concern that the overall perception of school climate will change due to leadership dimensions of a specific team leader.

In allowing other teachers to learn about leadership and have the opportunities to experience the responsibility of leading a team of teachers, the leadership capacity of the building increases, making a stronger team of teachers. (Crowther, Ferguson, & Hann, 2009). Overall, this research study adds to the body of existing knowledge in that it corroborates the findings of the relationship between Principal Openness Index and school climate, which allows principals the opportunity to share leadership among their staff without feeling that they are jeopardizing their school climate.

Limitations

One limitation commonly associated with correlational research is the incapability to determine a cause and effect relationship (Gall et al., 2007). In addition, there was no guarantee that other confounding variables attributed to the overall results. Warner (2013) suggests that statements can be made only in regards to a predictive relationship. To ease the impact of this limitation, the researcher interpreted the results of the data analysis as correlational.

Another common limitation to correlational research as described by Gall et al. (2007) is that the process of data analysis requires the reducing of two complex constructs. The study focused on two complex constructs, leadership styles of teacher team leaders and school climate. Both constructs were measured by several subscales, due to their comprehensive, complex nature. It is possible that the correlational study did not depict the relationship between teacher team leaders' leadership dimensions and school climate. Using valid and reliable instruments restricted the likelihood of this occurring. The nine leadership dimensions used (Idealized

Influence: Attributed, Idealized Influence: Behavioral, Inspirational Motivation, Intellectual Stimulation, Individualized Consideration, Contingent Reward, Management by Exception: Active, Management by Exception: Passive, and Laissez Faire) and the four subscales used (Teacher Openness Index, Collegial Teacher Behavior, Intimate Teacher Behavior, and Disengaged Teacher Behavior) have been researched and proved valid and reliable.

The data analysis method used within this study has an increased possibility for a Type I error due to the multiple analyses conducted and a greater probability of incorrectly rejecting the null hypotheses (Warner, 2013). Because of this, Warner (2013) notes that it is imperative that the researcher acknowledge this inflated risk throughout the analysis process (Warner, 2013). An additional limitation to this study could be that the sample population was limited to elementary teachers due to the nature and context of the study, as well as only using the surveys of complete teams (teacher team leader along with non-teacher team leader responses) negated the possibility of using some other participant data. Use of valid and reliable instruments helped to decrease the confounding variables. Data can only be generalized to this population due to the nature of convenience sampling, as not all elementary teachers within this school district participated in the study.

An external threat to validity could be the Hawthorne Effect. In this, it is suggested that participants could change their answers in order to please others, simply due to the added awareness or attention given as a participant in the research (Gall et al., 2007). External validity could be jeopardized due to the results may not generalize to a situation in which the researcher or others involved in the research are present (Gall et al., 2007). Special attention to participants was minimized to reduce this limitation. Additionally, the extent to which people are critical of themselves could be an additional limitation. Leaders who may lack self-confidence may rate

themselves in such a way that skewed the leadership dimension. For participants in the OCDQ-RE, ratings may have been inflated due to concern that their answers may circulate back to their school administrators. To minimize this limitation, the researcher kept all responses confidential.

Recommendations for Future Research

Future research should explore the relationship of these two constructs at a high school level in which department heads take on a different role than elementary teacher team leaders. It is plausible that this study could occur in a secondary setting and yield different results.

Additionally, conducting a similar study with a larger sample size may produce significant relationships; however, the sample size would need to consist of 199 teacher teams in order to reach 80% power. Conducting this study using a different measure of leadership styles could occur to examine if significant relationships arise when leadership styles are examined versus leadership dimensions. When using a different instrument with less predictor variables, the likelihood of a Type I error decreases. Future research should test these findings with a different population.

Additionally, future research should examine the predictive relationship of teacher leaders that are in a non-rotating position to see if this is an impact on the non-significant relationship between teacher team leaders' leadership dimensions and overall school climate. The researcher also recommends that future studies explore a similar study with a different instrument to measure climate. This study examined three subscales of school climate as well as two openness indexes to measure the degree of openness among teachers and principals. Using an instrument that measures the climate among the team of teachers, rather than looking at the

whole school, could yield different results as the teacher team leader could potentially have more of a significant relationship with just their team rather than the school at large.

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Appendix A

Multifactor Leadership Questionnaire Sample Items

For use by Ashley Watson only. Received from Mind Garden, Inc. on October 28, 2015

Multifactor Leadership Questionnaire

Leader Form

My Name: _____ Date: _____

Organization ID #: _____ Leader ID #: _____

This questionnaire is to describe your leadership style as you perceive it. Please answer all items on this answer sheet. **If an item is irrelevant, or if you are unsure or do not know the answer, leave the answer blank.**

Forty-five descriptive statements are listed on the following pages. Judge how frequently each statement fits you. The word "others" may mean your peers, clients, direct reports, supervisors, and/or all of these individuals.

Use the following rating scale:

Not at all	Once in a while	Sometimes	Fairly often	Frequently, if not always
0	1	2	3	4
1. I provide others with assistance in exchange for their efforts	0	1	2	3 4
2. I re-examine critical assumptions to question whether they are appropriate	0	1	2	3 4
3. I fail to interfere until problems become serious	0	1	2	3 4
4. I focus attention on irregularities, mistakes, exceptions, and deviations from standards	0	1	2	3 4
5. I avoid getting involved when important issues arise	0	1	2	3 4

*MindGarden prohibits the inclusion of the full instrument. The inclusion of sample items is limited to 5 items.

For use by Ashley Watson only. Received from Mind Garden, Inc. on October 28, 2015

Permission for Ashley Watson to reproduce 1 copy
within one year of October 28, 2015



www.mindgarden.com

To whom it may concern,

This letter is to grant permission for the above named person to use the following copyright material for his/her research:

Instrument: *Multifactor Leadership Questionnaire*

Authors: *Bruce Avolio and Bernard Bass*

Copyright: *1995 by Bruce Avolio and Bernard Bass*

Five sample items from this instrument may be reproduced for inclusion in a proposal, thesis, or dissertation.

The entire instrument may not be included or reproduced at any time in any published material.

Sincerely,

Robert Most
Mind Garden, Inc.
www.mindgarden.com

Appendix B

Directions for MLQ-5X Online

Dear Participants,

The study outlined below is being conducted by Ashley F. Watson, Doctoral Candidate, under the direction of Dr. Moore, Professor in the School of Business at Liberty University.

The Effect of Teacher Leadership Styles on Elementary School Climate is being conducted to examine the Transformational Leadership Theory and determine if the various leadership styles (transformational, transactional, and laissez-faire) have an effect on elementary school climate, while controlling for principal behaviors.

This survey, Multifactor Leadership Questionnaire, will determine your most prominent leadership style. In the survey, you will be evaluating how frequently or to what degree each of the statements applies to you as a leader. This study, The Effect of Teacher Leadership Styles on Elementary School Climate is being conducted to examine the Transformational Leadership Theory and determine if the various leadership styles (transformational, transactional, and laissez-faire) have an effect on elementary school climate, while controlling for principal behaviors.

Based on your role as a teacher team leader and in conjunction with your principal's agreement to allow your school to be used in this study, your interest is being solicited. Your participation is voluntary, and there are no known risks involved. The survey takes approximately 15 minutes. If possible, please take the survey uninterrupted. If, at any time, you wish to discontinue the survey, you are able to withdraw with no penalty.

If you agree to participate, please continue to the next page on which you will be able to give consent and answer a few demographic questions. The survey consists of 45 questions based upon a Likert-type scale in which you will select 0 – 4 describing your evaluation of the statement. If you would like, you may request results via this email address.

How to Withdraw from the Study

At any time, you may choose to withdraw from the study by simply informing the researcher that you would like to withdraw. Your responses will not be recorded, and you will not be recruited any further.

If you have any questions about this research study, please contact Ashley Watson at. Additionally, if you have any questions or concerns about your rights as a participant in this study, you may contact Dr. Moore with Liberty University's School of Business or Dr. Fernando Garzon, Chair of Liberty University's Institutional Review Board.

Thank you again for your interest in this study.

Sincerely,

Ashley F. Watson, Researcher

Liberty University

Appendix C

From: Watson, Ashley

Mon 12/30/2013 10:46 PM

Sent Items

To:

Good evening, Dr. Hoy,

I am currently an Ed.D. student at Liberty University, and I am in the initial phase of organizing research for my dissertation. As a Kindergarten teacher with a desire to move into leadership, I am interested in furthering my knowledge in the area of teacher leadership and its effect on school climate.

I read about your instrument, OCDQ-RE in the study conducted by G.L. Black in 2010 addressing Servant Leadership and School Climate. I am interested in building upon this existing body of knowledge.

Upon approval of my research proposal, would you consider granting permission for me to use your school climate survey, OCDQ-RE in my research? If so, what steps would you require to make this possible?

I greatly appreciate your time and consideration! I look forward to hearing back from you.

Warm regards,

Ashley Watson, Ed.S.

From: Wayne Hoy <>

Tue 12/31/2013 10:24 AM

To: Watson, Ashley;

Hi Ashley-

You have my permission to use any of my research instruments, including the OCDQ-RE, in your research. Just go to my webpage [www.waynehoy.com] and copy the form and read about the measure.

Good luck.

Wayne

Wayne K. Hoy

Fawcett Professor Emeritus in

Education Administration

The Ohio State University

www.waynehoy.com

Appendix D

OCDQ-RE

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

	Rarely Occurs	Sometimes Occurs	Often Occurs	Very Frequently Occurs
1. The teachers accomplish their work with vim, vigor, and pleasure.	1	2	3	4
2. Teachers' closest friends are other faculty members at this school.	1	2	3	4
3. Faculty meetings are useless.	1	2	3	4
4. The principal goes out of his/her way to help teachers	1	2	3	4
5. The principal rules with an iron fist.	1	2	3	4
6. Teachers leave school immediately after school is over.	1	2	3	4
7. Teachers invite faculty members to visit them at home.	1	2	3	4
8. There is a minority group of teachers who always oppose the majority.	1	2	3	4
9. The principal uses constructive criticism.	1	2	3	4
10. The principal checks the sign-in sheet every morning.	1	2	3	4
11. Routine duties interfere with the job of teaching.	1	2	3	4
12. Most of the teachers here accept the faults of their colleagues.	1	2	3	4
13. Teachers know the family background of other faculty members.	1	2	3	4
14. Teachers exert group pressure on non-conforming faculty members.	1	2	3	4
15. The principal explains his/her reasons for criticism to teachers.	1	2	3	4
16. The principal listens to and accepts teachers' suggestions.	1	2	3	4
17. The principal schedules the work for the teachers.	1	2	3	4
18. Teachers have too many committee requirements.	1	2	3	4
19. Teachers help and support each other.	1	2	3	4
20. Teachers have fun socializing together during school time.	1	2	3	4
21. Teachers ramble when they talk at faculty meetings.	1	2	3	4
22. The principal looks out for the personal welfare of teachers.	1	2	3	4
23. The principal treats teachers as equals.	1	2	3	4
24. The principal corrects teachers' mistakes.	1	2	3	4
25. Administrative paperwork is burdensome at this school.	1	2	3	4
26. Teachers are proud of their school.	1	2	3	4
27. Teachers have parties for each other.	1	2	3	4
28. The principal compliments teachers.	1	2	3	4
29. The principal is easy to understand.	1	2	3	4
30. The principal closely checks classroom (teacher) activities.	1	2	3	4
31. Clerical support reduces teachers' paperwork.	1	2	3	4
32. New teachers are readily accepted by colleagues.	1	2	3	4
33. Teachers socialize with each other on a regular basis.	1	2	3	4
34. The principal supervises teachers closely.	1	2	3	4
35. The principal checks lesson plans.	1	2	3	4
36. Teachers are burdened with busy work.	1	2	3	4
37. Teachers socialize together in small, select groups.	1	2	3	4
38. Teachers provide strong social support for colleagues.	1	2	3	4
39. The principal is autocratic.	1	2	3	4
40. Teachers respect the professional competence of their colleagues.	1	2	3	4
41. The principal monitors everything teachers do.	1	2	3	4
42. The principal goes out of his/her way to show appreciation to teachers.	1	2	3	4

Appendix E

Consent to Participate in Organizational Climate Description for Elementary Schools

Name: _____

School Name: _____

Grade Level: _____

I agree to participate in this study, The Effect of Teacher Leadership Styles on Elementary School Climate, and I grant permission for my responses and information to be used within this study.

Signature

Date

How to Withdraw from the Study

At any time, you may choose to withdraw from the study by simply informing the researcher that you would like to withdraw. Your responses will not be recorded, and you will not be recruited any further.

Please complete the following questions.

1. What is your gender? Male Female
2. What is your age? _____
3. What is your race? _____
4. What is your highest level of education? _____
5. How long have you been in the field of education? _____

Thank you for your participation.

Sincerely,

Ashley F. Watson, Researcher

Liberty University

Appendix F

LIBERTY UNIVERSITY

INSTITUTIONAL REVIEW BOARD

January 7, 2016

Ashley Watson

IRB Approval 2350.010716: The Effect of Teacher Team Leadership Styles on Elementary School Climate

Dear Ashley,

We are pleased to inform you that your study has been approved by the Liberty IRB. This approval is extended to you for one year from the date provided above with your protocol number. If data collection proceeds past one year, or if you make changes in the methodology as it pertains to human subjects, you must submit an appropriate update form to the IRB. The forms for these cases were attached to your approval email.

Thank you for your cooperation with the IRB, and we wish you well with your research project.

Sincerely,

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

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Appendix G

Dear (Principal Name)

This study is being conducted by Ashley Foland Watson, Doctoral Candidate, under the direction of Dr. Edward Moore, Professor in the School of Business at Liberty University.

The purpose of this causal comparative study is to examine if different leadership styles among teacher team leaders have an effect on school climate in elementary schools while controlling for principal behaviors. Research has found that principals have an effect on the overall school climate, and similar studies have found that teacher leaders have a positive effect on school climate as well (Xie, 2008). Sadeghi & Pihie (2012) found that academic department heads most often were characterized by transformational and transactional leadership styles, while some occasionally exhibited laissez-faire characteristics. However, no research has been conducted to examine the impact of teacher leadership styles on the overall school climate. In a study conducted by Roby (2011), it was suggested that further quantitative research be conducted in the future to explore teacher impact on school culture. School culture encompasses school climate (Macneil et al., 2009), and this study seeks to focus on school climate.

If you agree for your school to be included in this study, two surveys will be administered. First, a link to the online survey, Multifactor Leadership Questionnaire (MLQ-5X) will be sent to team leaders to determine their most predominant leadership style. Second, Organizational Climate Description for Elementary Schools (*OCDQ-RE*) will be administered in paper/pencil format. The author of this instrument recommends administration of this survey at a faculty meeting setting. The survey will be given to non-team leaders only, in order to avoid a repeated measures effect. A coding system will be used to match climate surveys to the appropriate team leader, and an Analysis of Covariance (ANCOVA) will be used to determine if

there is a statistical difference in elementary school climates based on teacher team leader leadership styles.

How to Withdraw from the Study

At any time, you may choose to withdraw from the study by simply informing the researcher that you would like to withdraw. Your responses will not be recorded, and you will not be recruited any further.

If you have any questions about this research study, please contact Ashley Watson at. Furthermore, if you have any questions or concerns about this study, your rights, or the rights of participants, you may contact Dr. Edward Moore with Liberty University's School of Business, or Dr. Fernando Garzon, Chair of Liberty University's Institutional Review Board.

If you agree to your school's participation, please provide a signed statement on approved letterhead indicating your approval. A staff list of names and grade levels with team leaders denoted will be needed so that the coding process can be precise. All information will be kept confidential. The overall results of your school's data will be available to you upon request.

Thank you in advance for your time.

Sincerely,

Ashley Foland Watson, Researcher

Liberty University

Appendix H

Dear Participants,

This email is a reminder to please take the survey which examines the effect of teacher leadership styles on elementary school climate. Your participation in this study is voluntary. If you choose to participate, you will complete the 45 Likert formatted questions on the link below. Completion of the survey should take approximately 15 minutes. It is asked that you take it now if possible. There are no known risks associated with your participation in this research study and all submissions are completely anonymous.

Link to Survey: _____

If you have any questions about this research study, please contact Ashley Watson at. Furthermore, if you have any questions or concerns about your rights as a participant in this study, you may contact Dr. Edward Moore with Liberty University's School of Education, or Dr. Fernando Garzon, Chair of Liberty University's Institutional Review Board.

Thank you in advance for your time.

Sincerely,

Ashley Watson, Researcher

Liberty University

Appendix I

Online consent for MLQ from Transform Survey Hosting by MindGarden

1. I understand that my participation in this survey is solicited solely on my role as a team leader within a participating elementary school for the study The Effect of Teacher Team Leaders' Leadership Styles on Elementary School Climate. Yes No

2. I understand that I have the right to withdraw from this survey and study at any time with no penalty to me and my answers will not be recorded. Yes No

3. How to Withdraw from the Study: At any time, you may choose to withdraw from the study by simply informing the researcher that you would like to withdraw. Your responses will not be recorded, and you will not be recruited any further.

4. I understand that if I have questions at any time, I may contact Ashley Watson, researcher, at, Dr. Edward Moore with Liberty University's School of Business, or Dr. Fernando Garzon, Chair of Liberty University's Institutional Review Board at Yes _____
No _____

5. I understand that my information will be kept confidential to the researcher only and will have no effect on my employment or position within the school district. Yes No

6. By clicking yes, I agree to participate in this study, The Effect of Teacher Leadership Styles on Elementary School Climate, and I grant permission for my responses and information to be used within this study.

7. My gender is Male Female

8. The age range that best describes me is 20-30 30-40 40-50 50-60 60-70

9. My race can be described as _____ (Fill the blank)

10. My highest level of education is

Bachelor's Master's Specialist Doctorate

11. How long have you been in the field of education? Please choose the range that best fits you.

1-5 years 5-10 years 10-15 years 15-20 years 20-25 years

25 – 30 years More than 30 years

Appendix J

Dear Participants,

Thank you for your participation in the study concerning teacher leadership styles and school climate. Confidential information and results obtained will be used for the completion of a doctoral dissertation. If you would like to know the results of the study, please email the researcher at awatson72@liberty.edu.

Sincerely,

Ashley Watson, Researcher

Liberty University