

## ABSTRACT

TIMMERMAN, ANNEMARIE. Examining the Relationship Between Teachers' Perception of the Importance of the Individually Considerate Transformational Behaviors of School Leadership and Teachers' Perception of the Importance of the Peer Cohesion of School Staff. (Under the direction of Dr. Robert Serow.)

Transformational leadership theory describes the process through which leaders develop associates of an organization to higher levels of ability and potential in order to achieve organizational goals. The purpose of this study is to investigate the relationship between the individually considerate transformational leadership practices of school leaders and peer cohesion among teachers in high performing schools. Specifically, the study explores the relationship between teachers' perception of the importance of the individually considerate transformational leadership practices of school principals (support of school staff members and development of staff members' leadership potential) and teachers' perception of the importance of a collegial, cohesive climate among the teaching faculty at successful schools in North Carolina. Survey data were collected from 53 teachers from 26 high performing elementary schools under the North Carolina ABCs accountability program.

The method of analysis is multiple regression. An F statistic is used to determine if there is a significant relationship between the dependent variables and the independent variable. F-tests are used to test whether the two predictor variables (the support by administrators of school staff members and the cultivation of the leadership potential of staff members by the principal) account for a significant amount of variance in the criterion variable, peer cohesion,

beyond the variance accounted by the other predictors at alpha  $p < .05$ . Results from the study indicate that there is a relationship between teachers' perception of the importance of the individually considerate transformational leadership practices of school principals and teachers' perception of the importance of a collegial, cohesive professional climate.

EXAMINING THE RELATIONSHIP BETWEEN TEACHERS' PERCEPTION  
OF THE IMPORTANCE OF THE TRANSFORMATIONAL INDIVIDUAL  
CONSIDERATION BEHAVIORS OF SCHOOL LEADERSHIP AND  
TEACHERS' PERCEPTION OF THE IMPORTANCE OF THE PEER  
COHESION OF SCHOOL STAFF

by

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A dissertation submitted to the Graduate Faculty of  
North Carolina State University  
in partial fulfillment of the  
requirements for the Degree of  
Doctor of Philosophy

EDUCATIONAL RESEARCH AND POLICY ANALYSIS

Raleigh, NC  
2007

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## Acknowledgements

Compelling evidence indicates that leadership is paramount in creating a positive school culture that promotes the exemplary performance of school staff and students. It was the attempt of this author to investigate the individually considerate transformational leadership practices of school leaders and the influence of those practices on staff cohesiveness in successful schools. If the author achieved this task, it was due to the direction and expectations of Dr. Robert Serow; the support of Dr. Paul Bitting, Dr. Ken Brinson, and Dr. Duane Akroyd; the confidence of a good friend, Benny Hendrix; and, the benevolent, kindhearted contributions of the many North Carolina public school educators who choose to make a difference.

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## Chapter One

### Introduction

Educational research indicates that school climate and leadership are influential factors in school organizational and student success. For example, a review of the literature on student academic engagement presented by the National Research Council and the Institute of Medicine (2004) provides convincing evidence that school climate and organization have important effects on student learning. A consistent finding in the studies reviewed is that a school culture that encouraged self-governance and peer cohesion among staff members is associated with greater student academic success (p. 100).

Taken together, the evidence suggests that student engagement and learning are fostered by a school climate characterized by an ethic of caring and supportive relationships; respect, fairness, and trust; and teachers' sense of shared responsibility and efficacy related to student learning. (p. 103)

In a longitudinal study of adolescent development of students from a public high school, Way and Robinson (2003) found that student perception of school climate associated significantly with psychological adjustment. Way and Robinson (2003) note that "interpersonal relationships that exist within a school setting, not only influence adolescents' academic achievement, goals, and ideals but also their psychological well-being (p. 340)."

Although the literature on school culture has recognized leadership as an essential element in determining organizational climate and productivity, few research studies have linked educational leadership and peer cohesiveness among school staff in high performing schools (Griffith, 1999; Kelley, Thornton & Daugherty, 2005). The literature on school leadership and school culture is largely theoretical (Deal & Peterson, 1999; Sergiovanni, 2000) or testimonial (Brucato, 2005). The behaviors of school leaders that promote a cohesive professional climate have been largely unexplored (Griffith, 1999). Barnett and McCormick (2004) observe in the research on school leadership

...vision gets most of the attention in the literature and is increasingly seen as a core leadership task that must be mastered by all leaders (Lashway, 2000), whereas individual concern has been overlooked. (p. 428)... In summary, the overall results of this study suggest that a better understanding of leadership in schools may be gained through increased investigation of specific leadership behaviors such as individual concern and vision and further consideration of individual principal-teacher (leader-follower) relationships in schools. (p. 430)

In order to meet the challenge outlined by Barnett and McCormick, more attention needs to be given to the relationship between school leadership and peer cohesiveness among school staff.

### *Peer Cohesion*

Examples of the influence of peer cohesion on student performance can be found in large scale quantitative studies by D'Agostino (2000) and Dellar (1999) as well as qualitative research by Irwin and Farr (2004) and Strahan (2003). Drawing from national data on Title I Schools in the United States, D'Agostino (2000) found a relationship between teachers' reported levels of collegiality and goal consensus, and students' mathematics achievement in schools. In their qualitative study of collaborative change projects and literacy, Irwin and Farr (2004) observed that teachers who felt a sense of community and were included in participatory decision making in their school also cultivated similar environments in the classroom. Teachers who worked in collaborative environments used more cooperative learning and authentic literacy activities with students. In his study of site-based management, school climate, and school improvement, Dellar (1999) also found that collaborative, group activities were more common classroom practice in schools where teachers participated in decision making. Finally, Strahan (2003) found in his case study of three schools that standardized test scores had increased over 25% in three years as a result of school reform efforts that emphasized teacher collaboration, and fostered the school professional community.

### *School Culture Leadership Theories*

Two theories that link school leadership, school culture, and school effectiveness are from Sergiovanni (2000) and from Deal and Peterson (1999). Sergiovanni (2000) describes the relationship between organizational management and organizational culture as a symbiotic connection between the systemworld and the lifeworld. In an effective educational organization, the social and cultural norms of the organization, the lifeworld, drive the organizational management, the systemworld. The educational leader structures organizational functions that optimize the conditions for students and teachers to engage in the school's primary function of teaching and learning.

Deal and Peterson (1999) describe eight roles that symbolic leaders take in shaping school culture: historian, anthropological sleuth, visionary, symbol, potter, poet, actor, and healer. As a historian and sleuth, a leader seeks to understand the school culture in order to shape or reinforce it. As a visionary, symbol, potter, and poet, a leader represents the school culture through vision and language, and symbolic routine and rituals. As actors and healers, school leaders use significant events or incidents to sustain a positive school culture or to adapt school cultures in need of transition. Deal and Peterson's model of the symbolic leader suggests that the culture of the school can be shaped in part by the actions and insight of the school leader.

### *Leadership Models*

Hallinger's model of instructional leadership is the most frequently used conceptualization of educational leadership (Hallinger & Murphy, 1985; Hallinger, 2003). His model identifies three dimensions of educational leadership: (a) defining the school's mission, (b) managing the instructional program, and (c) promoting a positive school climate. In practice, researchers generally distinguish between instructional leadership which refers to educational goals, and teaching and learning activities; and, organizational leadership which refers to administrative activities and organizational processes (Griffith, 1999).

Effective schools studies from the eighties describe instructional leadership as focusing "on the behaviors of teachers as they engage in activities directly affecting the growth of students" (Leithwood & Duke 1998, p. 47). School effects studies, such as Teddlie and Stringfield (1993), found that strong school leaders served as the impetus of a well-articulated mission centered on student success, and they fostered high teacher morale and community support. The principal influenced the school climate by creating and prioritizing the goals and mission of the school. When principals articulated a strong instructional mission statement and held high expectations for teaching and learning, teachers formed their own high expectations for students' academic achievement, and they became committed to helping students reach more challenging goals (Leithwood & Riehl, 2003).

Other research suggests that educational leadership is concerned chiefly with the maintenance of the organization (Supowitz, 2002; Hoy, 2003). From this perspective, a school leader is primarily responsible for creating and maintaining conditions that optimize teaching and learning. An educational leader directs program planning, budgeting, and business operations to maintain the order and structure in a school. By establishing and maintaining well-structured organizational processes, the principal facilitates the teacher's instructional work (Supowitz, 2002). In his study of instructional practice in an urban school district, Supovitz (2002) suggests that teachers "need structures that provide them with the leadership, time, resources and incentives to engage in instructional work" (p. 1618). Hoy (2003) likewise recognizes that rules and procedures can be mechanisms that can enable teacher productivity. In his study of school structure and organizational outcomes, Hoy (2003) found that an enabling school structure correlated positively with collegial trust in teachers and negatively with teacher's sense of powerlessness.

Behind the instructional framework or the organizational framework of leadership theories is the notion that organizational effectiveness is about people and their interactions. A principal's managerial skills are required to operate an organization; a principal's instructional knowledge is required to run a learning institution. A primary factor of effective leadership, however, is the ability to develop relationships (Fullan, 2001). A principal's ability to improve the human

capacity is the leadership skill that improves the quality of teacher instruction and student learning -- the organizational outcomes of a school.

Transformational educational leadership theory elaborates on the relationship between the school leader and individual staff members (Leithwood, Jantzi & Steinbach, 1999). Educational transformational leadership theory posits that school leadership should focus on developing the commitment and capacity of organizational members. By building individual capacity, leaders enable organization members to pursue shared organizational goals as well as personal goals (Leithwood & Reihl, 2003). Higher levels of commitment and capacity of organization members is assumed to result in higher productivity and improved educational outcomes.

Despite the implication in educational literature that there is a relationship between school leadership and peer cohesiveness, the connection between the two constructs remains largely conceptual. Clearly, educational theorists conclude that leadership can influence school culture by creating a collaborative work climate among the staff. The divergent conceptual models of educational leadership verify, equally clearly, that researchers have not explained the manner in which educational leaders improve peer cohesiveness and, as a result, student academic achievement. Important for research and practice is a depiction of the educational leadership behaviors that create an effective cohesive professional culture.

In Leithwood's model of transformational leadership theory, direction setting comes to the fore as an attribute of strong leadership. Leithwood et al. (1999) suggest that collaborative planning and goal development by the school staff leads to a transformation of the school culture. Transformational leadership provides a theoretical framework in which to examine more closely the leadership behaviors that influence school culture, peer cohesiveness, and, consequently, student academic performance.

### *Transformational Leadership*

Transformational leadership theory is founded on Burn's (1978) general theory of leadership. Burn uses Maslow's hierarchy of needs of individuals from security to self-actualization as the formation of the leader/follower relationship. Using Burn's ideas of individual fulfillment, Bass (1985) describes the relationship between a leader and organizational members as a series of interactions ranging from transactional to transformational exchanges. Bass and Avolio (1994) developed Bass' leadership/follower construct into The Full-Range Leadership model, the transformational leadership model most often applied to the educational setting. Fundamental to the Full-Range Leadership model is that leaders do more with associates than facilitate exchanges or agreements on acceptable productivity. Leaders behave in ways that generate commitment and greater results from associates by employing one or more behavioral dimensions labeled the "Four I's": Idealized Influence, Inspirational Motivation, Intellectual Stimulation and Individual Consideration.

Leithwood and his colleagues have completed the most extensive research on Bass and Avolio's (1994) transformational leadership model within the educational environment. Leithwood (1994) describes "people effects" as the foundation of transformational leadership. Transformational leadership theory describes the process through which leaders develop associates (followers) to higher levels of ability and potential to achieve the goals of the organization (Bass & Avolio, 1994). Transformational leadership is characterized by leader relationships with individuals. Through these relationships, a school leader is able to encourage staff members (associates) to apply their abilities, skills, and efforts toward the shared purpose of the organization (Barnett & McCormick, 2003). Similar to Hallinger's three dimensions of instructional leadership, Leithwood, Jantzi, and Steinbach (1999) identify three broad categories of school leadership behavioral practices: (a) setting direction, (b) designing the organization, and (c) developing people. Under the three categories, the most common behavioral practices identified in the literature on transformational leadership in schools are:

1. setting direction: building school vision and goals, and setting high expectations for students and staff,
2. designing the organization: building the school culture and organizational structure, and

3. developing people: providing intellectual stimulation, offering individualized support, and serving as a role model for professional practice.

Under the third category of developing people, Leithwood's transformational educational leadership model elaborates on the more traditional models of instructional and organizational leadership. With the third category, Leithwood supplements other instructional leadership models by focusing on the individual relationships between school leaders and staff members. Some studies indicate that school leadership can influence individual staff members' commitment to the school community and to organizational goals by developing personal relationships with each faculty member. In their study of situational leadership, Kelley et al. (2005) found that school climate was directly linked to teachers' perception of principal effectiveness, and that teachers' perception of principal effectiveness was influenced by the principal's ability to address the needs of individual teachers or to respond to diverse situations. In their study of leadership and school learning culture, Barnett and McCormick (2004) use structural equation modeling to show a significant direct relationship between teachers' perception of the individual concern behaviors of their principal and their perception that there was a shared school vision. Barnett and McCormick posit that teachers may be more likely to respond to a school vision if a principal has developed a trusting relationship among teachers through individual concern for teacher growth and well-being.

### *Conceptual Framework*

Leithwood's model of transformational leadership depicts the same dimensions of educational leadership as Hallinger's well-established model of instructional leadership: setting direction, maintaining the organizational function, and promoting a positive school culture (Leithwood et al., 1999). Leithwood's model of educational leadership differs from Hallinger's original model of instructional leadership with the added dimension of developing people. With the inclusion of the individual consideration practices of school leadership to the model, Leithwood depicts the behavioral and cultural aspects of school leadership within the theoretical framework of transformational leadership. Leithwood delineates two components of individual consideration practices: developmental and supporting.

Hallinger suggests that a school leader must understand the needs of individual staff members in order to obtain their support and commitment, and to create a collaborative organizational environment. Likewise, by understanding staff member needs and aspirations, a school leader can help staff members fulfill personal ambitions and link their personal goals with school goals. The leader provides learning opportunities that allow staff members to reach personal goals and to prepare to assume leadership roles within the organization (Bass & Avolio, 1994). Staff members who benefit from the nurturing and the developmental support of school leaders are more likely to garner support from colleagues for school goals.

The individual consideration practices of school leaders also include supporting school staff members in their job performance (Leithwood and Reihl, 2003). By providing attention to individual staff members, school leaders assure staff that, when problems are encountered, they will take staff members' issues seriously and make every effort to support staff in handling problems. School leaders gain the trust of staff when staff members perceive the school leader as supportive.

Leithwood (1993) recognizes that individual consideration is unlikely to influence organizational climate by itself. According to Leithwood et al. (1999), the individually considerate practices of school leaders abet teacher motivation and commitment to pursue a shared vision. By establishing trust with the school faculty through individually considerate behavioral practices, the school leader enables the effectiveness of other transformational practices, such as defining a shared school mission.

Hallinger conceptualizes individual consideration as the foundation of all other practices of instructional and organizational leadership (Hallinger, 2003; Marks & Printy, 2003). Hallinger's conceptualization of transformational leadership models the notion affirmed by other educational research (Griffith, 1999; Hallinger, et al., 1996; Hallinger & Heck, 1998): the impact of leadership on student outcomes is a second-order effect mediated by the school culture and organizational climate. Hallinger (2003) suggests, however, that in order to understand the relationship between school leadership, organizational culture, and

student academic achievement, research is needed that depicts the specific behaviors of a school leader that influence school culture. A conceptualization of leadership individual consideration practices as the foundation of peer cohesiveness and organizational climate is illustrated in Figure 1.

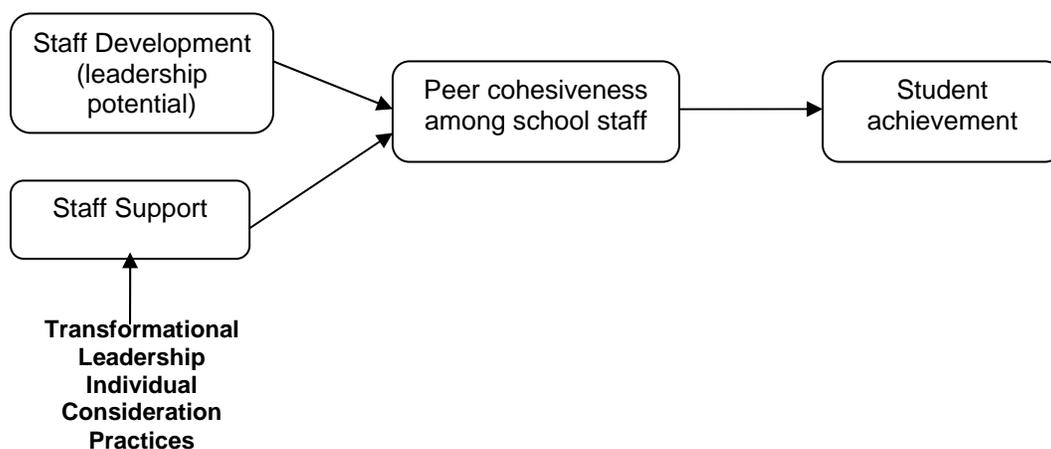


Figure 1. Conceptual framework for individually considerate transformational leadership practices and a cohesive professional climate

### *Statement of the Problem*

Voluminous research establishes the importance of school leadership and outlines lists of leadership practices commonly observed in effective schools (Griffith, 1999; Kelley, Thornton & Daugherty, 2005; Leithwood, & Reihl, 2003; Marzano, Waters & McNulty, 2005). In general, researchers concur that the effects of leadership on student academic achievement are second-order indirect effects mediated by the school culture (Hallinger & Heck, 1998, Hallinger,

Bickman & Davis, 1996). However, the leadership behavioral practices that promote a cohesive professional culture are less understood.

Theoretical models (Sergiovanni, 2000; Deal & Peterson, 1999) suggest that principals can perhaps impact organizational effectiveness by fostering the personal growth of colleagues and by guiding their social interactions toward desirable outcomes (Fullan, 2001; Leithwood et al., 1999). Work by D'Agostino (2000), Dellar (1999), Irwin and Farr (2004), and Strahan (2003) indicate that peer cohesiveness among school staff can improve classroom practice and student performance. Peer cohesion and a sense of community within a school influence the instructional practices of teachers (D'Agostino, 2000; Irwin & Farr, 2004; Strahan, 2003). School leaders have the potential to impact student performance through their influence on the school organizational culture and peer cohesiveness.

Educational researchers agree that leadership matters. Nevertheless, educational researchers have presented varied conceptual models of effective school leadership and its impact on organizational climate (Sergiovanni, 2000; Hallinger, 2003; Deal & Peterson, 1999; Leithwood, et al, 1999; Marzano, Waters & McNulty, 2005). In his study of the relationship between leadership and school climate, Griffith (1999) suggests that further research needs to be conducted on the relationship between leadership behaviors and collegiality among school staff. With increasing responsibility being placed on school leaders to maintain high academic performance, it is necessary to identify linkages between school

leadership and school organizational climate, and to identify the actual behavioral practices of school leaders that enable a cohesive professional culture. The study described here is designed to contribute to an understanding of how the principal's leadership role affects a school's organizational climate and student academic performance. The individually considerate transformational leadership practices of school leadership will be explored in this study as a factor in creating a cohesive professional school climate. Namely, do school leaders in high performing schools who employ individual consideration practices have teachers with higher levels of peer cohesion?

#### *Purpose of the Study*

The purpose of the study is to investigate the relationship between the individually considerate transformational leadership practice of school leaders and peer cohesion among teachers in high performing schools. Specifically, the study will explore the relationship between teachers' perception of the importance of principals' individual consideration practices (support of school staff members and development of staff members' leadership potential) and teachers' perception of the importance of a collegial, cohesive climate among the teaching faculty at successful schools in North Carolina. Because this study measures teacher perceptions, the unit of analysis is the teacher.

Multiple regression analysis will be used to determine if there is a significant relationship between the criterion variable of peer cohesion and the two predictor variables of individual consideration (the support by administrators

of school staff members and the development of the leadership potential of staff members by the principal). F-tests will be used to measure whether the predictor variables account for a significant amount of variance in the criterion beyond the variance provided by the other predictors at alpha  $p < .05$ .

### *Research Question*

Identifying specific leadership behaviors that affect the organizational climate of high performing schools may provide a better understanding of how leadership indirectly influences teaching and learning. The transformational leadership model developed by Leithwood and others focuses on the relationship between leaders and teachers within an educational organization. The purpose of the study is to investigate the relationship between teachers' perception of the individually considerate transformational leadership practices of school leaders and peer cohesion among teachers in high performing schools. This study relies on one major guiding question: Do school leaders in high performing schools who employ the transformational leadership practice of individual consideration have teachers with higher levels of peer cohesion?

A desired outcome of this study is to test the hypothesis that in high performing schools, a relationship exists between teachers' perception of the importance of the individually considerate transformational leadership practices of school leaders (support of school staff members and development of staff members' leadership potential) and teachers' perception of the importance of a collegial, cohesive climate.

### *Significance of the Study*

Abundant research on school culture has shown that a positive organizational environment impacts the effectiveness of schools and student outcomes (Cobb, McClain, Lamberg, & Dean, 2003; D'Agostino, 2000; Dorman, 2001; Pashiardis, 2000). Effective professional school cultures have been characterized as having strong peer cohesion, professional collaboration, a high degree of professional involvement, and participatory decision making among the faculty (Cobb et al., 2003; D'Agostino, 2000; Dellar, 1999; Dorman, 2001; Irwin & Farr, 2004; Pashiardis, 2000; Stockard & Mayberry, 1992; Strahan, 2003). In a review of literature on effective learning environments, Stockard and Mayberry (1992) conclude that the set of norms and values that promote learning within a school are driven by the nature of relationships that exist among school members. Research supports Stockard and Mayberry's conclusions that a positive school culture and effective organizational climate influence the teaching practices within the classroom and student academic achievement (Cobb, et al., 2003; D'Agostino, 2003; Strahan, 2003; Dorman, 2001; Dellar, 1999; Irwin & Farr, 2004; Hopkins, et al., 1994; Pashiardis, 2000).

Throughout the literature on school culture, leadership is identified as a critical factor in shaping the culture of the school. The common element in theoretical positions that tie school leadership to culture is the supposition that success in leadership and, consequently, its affect on academic success is mediated by a positive school culture (Sergiovanni, 2000; Griffith, 1999; Deal &

Peterson, 1999; Hallinger, Bickman & Davis, 1996; Hallinger & Heck, 1998). While principal leadership has been identified as a factor in promoting a positive school culture, the specific qualities of an effective school principal have been portrayed in general terms as an instructional leader and strong communicator who must balance both the organizational and relational processes within the school to guide activities affecting student growth (Southworth, 2002). To further explore the leadership practices that promote an effective school culture in high performing schools, consideration needs to be given to the manner in which leadership behaviors affect the school environment and influence teachers working within the school. As a means of exploring the relationship between leadership and peer cohesiveness, school leadership is conceptualized within transformational leadership theory. The emphasis of the study is on the individual consideration dimension of the transformational model.

#### *Limitations of the Study*

##### *Measure of school effectiveness.*

Most studies on school effectiveness have used standardized test scores as documented evidence of school success. Hallinger, et al. (1996) explain that because the principal's impact on school effectiveness is determined by student productivity, standardized test scores serve as the most common indicator of student academic outcomes. This study assumes school effectiveness as defined by the North Carolina ABCs Accountability program; a School of Distinction or School of Excellence is one where 80% or more of the students score at or above

Achievement Level III (consistent mastery of subject/course content matter) on state standardized test scores.

*Response rate.*

A source of error in survey research is nonresponse (Dooley & Linder, 2003). Nonresponse error refers to the subjects in the sample frame identified in a study who fail to respond to a survey. The characteristics of nonrespondents may differ from respondents, resulting in nonresponse bias and limiting the external validity of the study. External validity assumes that the results of a study from a sample would be the same if 100% of the population participated in the study. To generalize findings from a study of a sample to the population, research procedures need to establish relationships between narrowly focused research findings from a sample and the broader population. The higher the response rate obtained in a study, the lower the risk of experiencing nonresponse bias in the study.

Unfortunately, response rates in survey research appear to be declining. For example, Dey (1997) noted a decline of the response rate in higher education research studies from an average of 58% in 1960-1961 to 21% in 1987-1991. Bourque and Fielder (2003) suggest that in general a researcher can expect a response rate of 20%.

Limited access to technology and lack of familiarity of technology on the part of the respondent can potentially affect the response rate to online surveys (Shannon & Bradshaw, 2002). Web-based surveys are advantageous as a time-

and cost-saving method of data collection (Mertler, 2003). Data from online surveys is easily transferred to database or statistical software reducing the chance of data input errors. Disadvantages of web-based surveys include the inability to control the uniformity of appearance of the online survey among different computer setups and internet browsers. Security, confidentiality, and technical problems also present challenges that can affect response rate.

Research literature on web-based surveys reports varying response rates (Sax, Gilmartin & Bryan, 2003). Most research on response bias indicates a lower response rate to web-based surveys than to paper surveys (Bourque & Fielder, 2003; Mertler, 2003; Sax, 2003). In a study of first year college freshmen, Sax, et al. (2003) report a response rate of 17.1% to 19.8 % for administrations of the web-based survey, *Your First College Year*. Administrations of the conventional paper equivalent of the survey received a response rate of 22% to 24%. In another comparison-type study of response rate of public school teachers, Mertz (2003) received a response rate of 21% from the paper version of and a response rate of 11% from the web version of *The Classroom Assessment Literacy Inventory*. Bourque and Fielder (2003) suggest that in general a researcher can expect a response rate between 10% and 20% for web-based surveys. The impact on the response rate of the web-based delivery of the survey in this study is undetermined.

Nevertheless, the small sample size of this study is a limitation. The study relies on the perceptions of teachers with respect to leadership and school culture

in high performing schools in North Carolina under the ABCs accountability model. 26 schools were represented in the study, often with only a single response from a given school. The findings from the study should be validated in future research with a larger sample and higher representation from each participating school.

### *Definition of Terms*

This study uses the following definitions:

Follower: The original term “follower” was used by Burns (1978) to describe individuals who are brought together within a community, organization or society and who interact with each other for a common purpose. The “leader”, as part of the same community, organization or society, is different from the follower. The leader provides initiative and direction the in carrying out the common purpose. In this paper “follower”, “associate” and “teacher” (within educational settings) are used interchangeably.

Level I: According to the North Carolina ABCs Accountability program, students performing at this level do not have sufficient mastery of knowledge and skills in this subject area to be successful at the next grade level.

Level II: According to the North Carolina ABCs Accountability program, students performing at this level demonstrate inconsistent mastery of knowledge and skills in this subject area and are minimally prepared to be successful at the next grade level.

Level III: According to the North Carolina ABCs Accountability program, students performing at this level consistently demonstrate mastery of grade level subject matter and skills and are well prepared for the next grade level.

Level IV: According to the North Carolina ABCs Accountability program, students performing at this level consistently perform in a superior manner clearly beyond the mastery level required to be proficient at grade level work.

School climate/culture: “School climate” and “school culture” are used interchangeably throughout the study. Briefly, “school culture” refers to the set of common norms, beliefs and values that govern the relationships among the different members of the school community.

School of distinction: According to the North Carolina ABCs Accountability program, a School of Distinction is one where 80-89% of the students score at or above Achievement Level III (consistent mastery of subject/course content matter).

School of excellence: According to the North Carolina ABCs Accountability program, a School of Excellence is one where 90-100% of the students score at or above Achievement Level III (consistent mastery of subject/course content matter).

Socioeconomic status (SES): For this study, low socioeconomic status refers to the percentage of students who qualify for the federally free or reduced lunch program. A student qualifies for this program based on parental income

and the number of people living in the student's household, thus making free or reduced lunch qualification a good indicator of the student's financial resources.

### *Summary/Overview*

The need for a clearer understanding of the leadership behaviors that influence the professional climate of a school motivated this study. This chapter has provided the impetus and framework for the study of educational transformational leadership within the broader scope of educational leadership theory. Chapter two provides the history and theoretical framework of transformational leadership theory, its application to the education community, and places the specific practice of individual consideration within an educational transformational leadership model. Chapter three describes the methodology used to study the relationship between teachers' perception of the individually considerate transformational practices of school leaders and a collegial, cohesive climate among the teaching faculty in high performing schools. Chapter four provides the results of the data collection and the statistical procedures for conducting the study. Chapter five offers conclusions drawn from the results of the study and provides recommendations for future research.

## Chapter 2

### Literature review

To study the influence of school leadership on peer cohesion among school faculty, a theoretical construct of the transformational leadership practices within an educational setting will be developed in chapter two. A synopsis of the literature on leadership and school culture is followed by a review of the theoretical underpinnings of transformational theory within the literature on leadership. The educational transformational leadership model of Leithwood and others will provide the context for the review of transformational leadership research in the educational setting. Finally, the individual consideration practices of school leaders will be positioned within a model of educational transformational leadership.

#### *School Culture and Leadership*

School climate or culture has been described as the personality of the school (Pashiardis, 2000). Relationships among students, teachers, and the community affect the attainment of school goals and the behavior of the staff and students. Deal and Peterson (1999) point out that culture is an anthropological term that generally refers to the set of common norms, beliefs, and values that govern the way people interact with each other. The term “school culture” implies a study of individuals who each fill a role within an interdependent group of school staff (Maehr & Midgley, 1996). Each school develops a unique character that can be described through social science or anthropological

principles. Expanding on the model of group culture by anthropologist Edgar Schein, Hopkins, Ainscow and West (1994) specify the six dimensions of school culture as:

- *observed behavioral regularities* when teachers interact - the language they use and the rituals they establish;
- the *norms* that evolve in working groups of teachers in terms of lesson planning or monitoring the progress of students;
- the *dominant values* espoused by a school, its aims or 'mission statement';
- the *philosophy* that, for example, guides the dominant approach to teaching and learning of particular subjects in a school;
- the *rules of the game* that new teachers have to learn in order to get along in the school or their department; and
- the *feeling or climate* that is conveyed by the entrance hall to a school, or the way in which students' work is or is not displayed. (p. 88)

Deal and Peterson (1999) suggest that a shared school mission and vision guide the actions of students and staff members by defining what is considered important. Reed's (2003) case study of a Chicago urban school confirms that the school mission and vision direct all school activities from frog dissection projects to the school décor. As Bryk and Schneider (2002) explain,

trust undergirds the highly efficient system of social control found in a school based professional community (p. 116).”

“Trust within a faculty is grounded in common understandings about what students should learn, how instruction should be conducted and how teachers and students should behave with one another. For teachers to sense integrity among colleagues, a faculty must not only share these views but also perceive that the actions taken by other teachers are consistent with them. (p. 130)

Deal and Peterson (1999) further elaborate that school leaders shape school culture by developing a mission that motivates staff members and by sustaining and strengthening the school norms, values, and beliefs. Based on his experience as a school principal, Brucato (2005) suggests that to create a positive learning environment school leaders “must carefully assess the culture and the history that defines it” (p. 9) and “get each and every member of the school community invested.” (p. 26). As Fullan (2001) explains

close relationships are not ends in themselves.

Collaborative cultures, which by definition have close relationships, are indeed powerful, but unless they are focusing on the right things they may end up being powerfully wrong. Moral purpose, good ideas, focusing on results, and obtaining the views of dissenters are essential,

because they mean that the organization is focusing on the right things. Leadership, once again, comes to the fore.

The role of the leader is to ensure that the organization develops relationships that help produce desirable results.

(p.67-68)

Leithwood, et al. (2004) observe that, even in successful large-scale reform efforts, leadership at all levels (regional, district, and local) engages in activities aimed at “developing people”. Contemporary leadership theories have focused on the relationships between the leader and followers (or associates) that influence organizational development. Transformational leadership theory concentrates on the people within the organization rather than organizational processes and on the leader’s ability to obtain the cooperation and commitment among personnel to reach shared goals (Huber, 2004). As Bass and Steidlmeier (1999) explain, “transformational leadership is value-centered. Leader and followers share visions and values, mutual trust and respect, and unity in diversity”(p. 202).

### *Transformational Leadership Theory*

#### *Burns’ leadership theory.*

In his seminal work on leadership in organizations, political entities and movements, Burns (1978) originated the concept of transformational leadership:

Leaders can also shape, alter, and elevate the motives, values, and goals of followers through the vital teaching

role of leadership. This is transforming leadership. The premise of this leadership is that, whatever the separate interests persons might hold, they are presently or potentially united in the pursuit of “higher” goals, the realization of which is tested by the achievement of significant change that represents collective pooled interests of leaders and followers. (p. 425-426)

Burns (1978) formed his theory of leadership from psycho-analytic theories of human nature to describe the practices and psychological states of leaders and associates. He describes the reciprocal relationship between leaders and associates based on Maslow’s hierarchy of needs, from the lower level human physiological needs and a sense of security to higher level needs for self esteem and a sense of belonging. With a transformational leader, associates should be elevated from concerns for security to concerns for achievement and self-actualization. Burns conceptualized two types of leader/follower interaction apart from power.

I will deal with leadership as distinct from mere power-holding and as the opposite of brute power. I will identify two basic types of leadership: the transactional and the transforming. The relations of most leaders and followers are transactional – leaders approach followers with an eye to exchanging one thing for another: jobs for votes, or

subsidies for campaign contributions. Such transactions comprise the bulk of the relationships among leaders and followers, especially in groups, legislatures, and parties. Transforming leadership, while more complex, is more potent. The transforming leader recognizes and exploits an existing need or demand of a potential follower. But, beyond that, the transforming leader looks for personal motives in followers, seeks to satisfy higher needs, and engages the full person of the follower. The result of transforming leadership is a relationship of mutual stimulation and elevation that converts followers into leaders and may convert leaders into moral agents. (p. 4)

Burn's conception of leadership later translated into several models of charismatic and transformational leadership, notably, Conger and Kanungo's behavioral model of leadership, Bass and Avolio's transformational leadership, and House and Shamir's charismatic leader (Conger, 1999). Most recently, Hacker and Roberts (2004) framed a transformational leadership model around organizations of meaning. Hacker and Roberts describe the role of leadership in constructing organizations of meaning around three mastery perspectives: self mastery, interpersonal mastery and enterprise mastery.

The most studied theory of transformational leadership in education, Bass and Avolio's (1994) model, elaborates on the juxtaposition of the

transformational and the transactional leader. Unlike Burns, Bass and Avolio describe a full range model where a leader could be both transactional and transformational rather than presenting two opposing constructs. Bass and Avolio further conceptualized transformational leadership by identifying four behavioral dimensions of leadership: Idealized Influence, Inspirational Motivation, Intellectual Stimulation and Individual Consideration.

*Bass and Avolio full range leadership model.*

In his book, *Leadership and performance beyond expectations*, Bass (1985) develops Burn's theories of transformational and transactional leadership into more refined constructs. Bass defines transactional and transformational leadership in terms of the leader-follower relationship and the organizational culture. Bass maintains that the transactional leader accepts the current norms, ideologies, and values of the organization and works within the cultural tradition to maintain organizational performance. The transformational leader shapes cultural norms and values and advances the ideologies of an organization by communicating and symbolizing the vision for the future and the goals for organizational performance. The full range leadership model is a theory designed to describe the interactions between a leader and his or her associates that can affect the performance of individuals and the organizational productivity.

Based on his study of leadership within industrial, military, and educational settings, Bass (1998) argued that transformational forms of interaction augment the effect of transactional forms of interaction. Transactional

interactions can be an effective form of leadership. Bass suggests that transactional leadership is necessary for the leader and the associate to reach an agreement on the requirements and expectations of individual performance. Transformational leadership, on the other hand, “motivate[s] others to do more than they originally intended and often even more than they thought possible” (Bass & Avolio, 1994, p. 3). When transactional leadership is augmented by transformational behavior, greater effort and higher levels of effectiveness and satisfaction are displayed by an associate. Three principle leadership processes are involved in achieving transformational results: (a) leaders raise followers' awareness about the importance and value of designated goals and the methods used to achieve those goals; (b) leaders motivate followers to align and to transcend their self-interests to meet organizational goals, and (c) leaders meet the lower level needs of associates and stimulate the desire of associates to fulfill higher order needs of self-actualization (Bass, 1985).

Over the decade following Bass' (1985) conception of the transformational leadership model, Bass and Avolio (1994) developed the full range leadership model through the continued study of industrial, military, and educational organizations. The popularity of the full range model is due to its simply labeled and easily defined components and to the development of the Multifactor Leadership Questionnaire (MLQ) for studying transformational and transactional leadership within organizations.

Under the two separate constructs of transformational and transactional leadership, Bass and Avolio (1994) identify seven different behavioral processes. Transactional leadership relies on three types of contingent reinforcement: “contingent reward”, “management-by-exception” and “laissez faire” leadership. Four behavioral components make up the dimensions of transformational leadership: “idealized influence”, “inspirational motivation”, “intellectual stimulation”, and “individualized consideration”. While the behavioral components of transformational leadership are overlapping and, therefore, ambiguous (Yukl, 1999), the difference between the behavioral components are best described by comparison.

Transactional leadership is the exchange of inducements by the leader to achieve the desired behavior or performance by associates (Avolio, 1999). Contingent reward is the most constructive transaction, where the leader and the associate have an agreement about the task that needs to be accomplished. The associate receives the agreed upon reward for successfully completing the task. Management-by-exception is a corrective transaction used to alter undesirable or ineffective performance. The associate’s activities are monitored to assure that organizational and performance standards are being met. If the standards are not met the transaction may be punitive. Laissez-faire is nontransactional. The leader minimizes interaction with associates and decision making is avoided. Without direction, associates determine the acceptable performance level to achieve organizational goals. The associate performs at a higher performance level with

the anticipation of personal gain. Compensation is random and granted outside of any transactional exchange.

Transactional leadership addresses the self-interests of the associates (Avolio, 1999). In exchange for acceptable performance levels associates receive personal benefits. If transactions between the leader and the associate are honored, a mutual trust is developed that forms the base for developing transformational relationships and motivating associates to perform at higher levels.

Transformational leadership occurs when a leader can create an environment that allows people to think beyond self-interest and support a shared higher purpose (Bass & Avolio, 1994). The transformational leader is able to reconcile the associate's needs with the organizational mission to maximize the performance level of each individual. The transformational leader does this by moving individuals to the higher level need of self-actualization on Maslov's hierarchy and by fulfilling higher level needs through learning opportunities and developmentally appropriate assignments. For the transformational leader, the development of associates is necessary to maximize the productivity of the organization. The transformational leader's goal is to develop associates into leaders.

By assuring self-actualization needs of associates are fulfilled, transformational leaders broaden associates' interests beyond self-interest to the interests and mission of the organization. In this manner, transformational leadership moves beyond transactional exchanges by motivating associates to achieve superior results. To fulfill their transformational obligations to associates transformational leaders maintain a set of internal standards that guide their own behavior and their interactions with other people (Avolio, 1999). Three behavioral components – inspirational motivation, intellectual stimulation, and individualized consideration – focus on the development of associates. The fourth behavioral component, idealized influence, is concerned with the leader's own internal development as well as the development of others.

Leaders are idealized when they serve as role models for associates. The leader serves as the image of the achiever and archetype of the moral agent for the associate to follow (Avolio, 1999). Idealized influential behavior provides a standard of performance and models the ideologies of the organization for the associate by the leader. The transformational leader is able to articulate a vision and goals for performance and to persuade others to put forth their best effort to obtain that vision (Bass, 1985). Idealized influence can be described as charismatic; it arouses associate loyalty or enthusiasm for the leader, just as much as it arouses associate loyalty for the mission of the organization (Bass 1998).

Bass (1985) defined inspirational motivation as different from idealized influence with respect to charisma. The intent of idealized influence behaviors of leadership is to unite a group behind shared goals and purpose by communicating a shared mission. The leader serves as the role model (the ideal) for associate behavior and performance that sustain organizational goals. Inspirational motivation focuses more on the individual relationship between the leader and the associate. The leader concentrates on building individual confidence and enthusiasm in the work associates perform. Motivation is improved by providing meaning to an associates work and recognizing the importance of the individual's role in obtaining the group's shared goals (Avolio, 1999).

Intellectual stimulation extends the relationship that the leader has developed with the associate through inspirational motivational behavior by encouraging associates to apply "cognitive creativity" when approaching tasks, tackling obstacles, and finding solutions to enhance productivity (Bass, 1985). Inspirational motivation practices incite an instant emotional response from associates. Intellectual stimulation practices, on the other hand, concentrate on developing associate strategic thinking, engaging associates in the analysis and evaluation of problem-solving, and directing associates to apply theory and research in identifying solutions to problems. The leader does not require that the associate's opinions be identical to his or her own (Bass, 1998). Instead, the leader establishes an environment that encourages innovation and creativity. Within an environment that promotes creative problem-solving, associates are

comfortable with implementing innovative solutions and risking the possibility of setbacks. Bass and Avolio (1994) view intellectual stimulation as necessary for continuous improvement.

Intellectual stimulation and inspirational motivation are the leadership behaviors that directly associate productivity with motivation toward accomplishing organizational or group goals (Bass & Avolio, 1994). The final behavioral component of transformational leadership, individual consideration, focuses on the personal needs and goals of the associate. Individual consideration reinforces the development and enthusiasm of the associate cultivated through intellectual stimulation and inspirational motivation by providing personal attention to an associate's needs or ambitions and creating avenues for associates to fulfill those ambitions. Individual consideration leadership behavior concentrates on advancing the associates' personal goals and capacity through organizational practices.

Individual consideration is the leadership behavior most focused on the relationship between the leader and the associate (Bass, 1985). Through individual consideration, the leader approaches organizational productivity by providing differentiated attention to each associate. Individualized consideration implies face-to-face contact between leaders and associates. Differentiated attention recognizes that all people are not motivated by the same transactional exchanges or ideals. Each associate is treated differently according to their

individual needs and capabilities. The leader delegates opportunities and tasks based on associates' personal ambitions and potentials.

Through individual consideration, the leader approaches associate performance with a developmental orientation (Bass, 1985). The leader defines a developmental program for associates based on personal abilities and aspirations. The leader who has taken the time to learn the skills and ambition of associates will more effectively align associates' responsibilities with their aspirations and delegate tasks to those associates who are most able to perform those tasks (Bass, 1998). As part of the associate developmental program, the leader provides learning opportunities for the personal growth of associates (Avolio, 1999). The benefits of continuing education for the associate and the organization are recognized. Leaders encourage self-development through training and continuing education. The leader creates a supportive climate that encourages the associate to obtain additional education.

The leader elevates personal potential of associates by sharing his knowledge and experience as a mentor. The mentorship role of the leader provides the associate with a support network to fulfill organizational responsibilities (Avolio, 1999). Mentoring and coaching by a leader create a sense of security for the associate by providing someone to whom the associate can turn for counseling and advice. Mentoring enhances associate productivity by instilling a sense of competence in the associate's abilities to pursue personal goals (Bass, 1998).

*Research on Transformational Leadership in Non-school Contexts*

Bass (1985) developed his model and wrote his first book on transformational leadership in 1985. He designed his model based on his first study of 176 military, foreign and civilian officers, and subsequent studies of managers and supervisors, educational administrators. Bass developed a 73 item survey to determine if respondents could differentiate between transactional and transformational behavior when rating leaders. From these first studies, Bass (1985) concluded that it was possible for respondents to differentiate between transactional and transformational leadership. He also concluded that transformational leadership does contribute to associate performance and to satisfaction with a leader beyond the contribution that can be attributed to transactional leadership. Bass and Avolio (1994) continued to study and to refine the transformational leadership model and the survey instrument first developed by Bass. The model became known as the full range leadership model and the instrument was titled the multifactor leadership questionnaire (MLQ).

Various leadership studies using the MLQ have found a positive relationship between transformational leadership and indicators of leader effectiveness in a variety of organizational contexts. Lowe, Kroeck, and Sivasubramaniam (1996) found in a meta-analytic review of 47 studies using the MLQ that transformational leadership behavior was highly associated with organizational and associate performance. Across the studies reviewed, charisma, intellectual stimulation, and individual consideration showed a strong positive

relationship with associate effectiveness. Charisma had the strongest relationship with associate perceptions of leader effectiveness. However, the most consistent observation was the strong relationship between associate perceptions of individual consideration behaviors of a leader and leader effectiveness. Lowe et al. also found that associate perceptions of the intellectual stimulation behaviors of a leader were strongly related with overall organizational performance as well as associate performance.

Other studies using the MLQ have noted the relationship between transformational leadership and associate commitment. Bycio, Hackett, and Allen (1995) found that transformational leadership had an association with an employee's affective commitment to the organization as well as his or her intentions to leave the organization. Likewise, Barling, Weber, and Kelloway (1996) found that associates' commitment was positively related to the transformational leadership behaviors of supervisors. Moreover, Barling et al. found that developing the intellectual stimulation and individual consideration behaviors of leaders resulted in positive changes in associates' perception of leaders and commitment to the organization.

Recently, researchers have explored the influence of emotional intelligence on transformational leadership and its impact of leadership effectiveness. Self-awareness, self-motivation, emotional management, empathy, and relationship management are identified as key social and personal skills that define an individual's emotional intelligence (Sosik & Megerian, 1999).

Leban and Zulauf (2004) found that a leader's emotional management related significantly with the inspirational motivation component of transformational leadership. In addition, Leban and Zulauf found that the strategic use of emotional management and relationship management was found to relate significantly with the idealized influence and individual consideration components of transformational leadership. In a study of managers' self-awareness and transformational leadership behaviors, Sosik and Megerian (1999) noted that self-awareness helped leaders understand their own thoughts and feelings and the implications of their emotional management on the motivational characteristics of transformational behaviors. Leaders who rated high in self-awareness on emotional intelligence scales were also rated high by associates as effective leaders. In sum, leaders who have reported high rates of emotional intelligence have also been perceived by associates as displaying transformational leadership behaviors and as being more effective leaders (Sivanathan & Fekken, 2002).

Few leadership studies outside of education have examined the relationship of leadership, culture, and organizational effectiveness. Block (2003) conducted one of the rare studies that examined associate perceptions of organizational culture and transformational leadership in a study of 782 employees in a sales and service organization. Using multiple regression, Block found that associate perception of the transformational behaviors of leaders accounted for a significant variance in associate perceptions of the organizational

cultural traits of involvement, consistency, mission, and adaptability. Associate perceptions of transactional behaviors of leaders accounted for a modest variance in associate perceptions in the organizational cultural traits. Evidence was also found that associate perceptions of proactive leaders were strongly related to associate cultural ratings of an organization. The data confirmed that leadership style as measured by the MLQ of associate perceptions was related to associate perceptions of organizational culture.

Theories of educational leadership have begun to examine the relationship between leadership style and organizational climate more extensively (Griffith, 1999; Hallinger, 2003; Lucas & Valentine, 2002). In response to the school reform movement of the 1980s, a paradigm shift occurred in educational leadership studies. Studies focused less on instructional leadership theories grounded in the supervision of teaching and more on transformational theories that emphasize the principal's role in capacity building of the school faculty and in professional collaboration (Hallinger, 2003; Marks & Printy, 2003). The most prominent model of transformational leadership in education was developed by Leithwood in the early 1990s (Leithwood, 1993).

#### *Transformational Leadership Theory within the School Context*

Adapting the full range leadership model by Bass and Avolio (1994), Leithwood and his colleagues advance transformational leadership theory within an educational context (See Leithwood, et al., 1999). Like Bass and Avolio's transformational leadership model, Leithwood's leadership theory concentrates on

achieving greater organizational productivity and success by developing personal capacity and shared commitment to school goals (Leithwood & Jantzi, 1999). Leithwood and colleagues conceptualize educational transformational leadership along three necessary practices: “setting direction”, “redesigning the organization”, and “developing people” (Leithwood, et al., 1999). Under the three broad categories, various transformational behavioral practices have been identified in the literature on educational leadership parallel to the leadership behavioral components in the full range leadership model by Bass and Avolio (1994).

*Setting direction.*

Leithwood, et al. (1999) identified three general functions of leadership under the practice of setting direction: building a shared vision, developing consensus on school goals, and setting high performance expectations. From recent studies on school leadership and effective schools, the most significant influence of leadership on academic achievement has been the formulation and communication of the vision, mission, and goals of the school to the staff and community (Hallinger, 2003; Hallinger & Heck, 1998; Teddlie & Stringfield, 1993). Barnett (2003) in his study of leadership and vision in schools notes that developing a vision is a collaborative process that involves every member of the school community. Consensus building is established through formal interorganizational relationships and communication processes that allow for continual open discourse. Transformational school leaders create a structure and

establish processes that allow associates to regularly engage in vision building and ongoing review of progress toward meeting shared goals.

Leithwood and Reihl (2003) describe leaders as charismatic in their ability to articulate the vision and the mission of the school. Leaders frame the school vision within a meaningful context that persuades members of the school community to work together to achieve that vision. Leaders foster shared commitment by aligning personal goals of associates with the school goals.

Numerous research studies have indicated that teacher' expectations of students influence students' academic self-image, student academic effort and, therefore, student academic performance (Diamond, Randolph, & Spillane, 2004; Ferguson, 2003; Janisch & Johnson, 2003; Schilling & Schilling, 1999). In an ethnographic study of teaching practice, organizational context, and the micropolitical dynamics of school leadership, Diamond et al. (2004) depicted the organizational structures that affected teacher expectations. Diamond et al. noted organizational structures that increased teachers' sense of responsibility for student learning. When school leaders engaged teachers in general conversations that promoted higher performance levels, teachers' expectations of student performance were raised. Teachers' expectations were raised and teachers were motivated to perform at higher levels when leaders articulated vision and goals as "challenging but achievable" (Leithwod & Reihl, 2003).

Setting a direction and defining a vision are enhanced when a leader monitors organizational performance and promotes goals that exceed current

standards (Leithwood et al. 2004). In a case study of seven principals at high performing schools, Jacobson, Johnson, Ylimaki, and Giles (2005) noted that the principals used accountability data to leverage their own expectations for student and faculty performance. Principals explicitly tied the development of school goals and procedures such as performance evaluations and professional development to standardized testing results. In a review of school reform studies where the use of data was a major component of the reform efforts, Earl and Fullan (2003) investigated school leaders' positions in negotiating the tensions between the use of data for surveillance and the use of data for school improvement. Earl and Fullan summarized the leader's role in the use of student data and creating organizational structures that raise expectations.

The role of the leader is to create the conditions for everyone else in the school and the community to have the knowledge that they need to move forward. They need 'assessment literacy'—the collective capacity of teachers and leaders in schools to examine data, make critical sense of it, develop action plans based on the data, take action and monitor progress along the way. (p. 392)

*Redesigning the organization.*

Clearly, Diamond et al. (2004), Jacobson et al. (2005), and Earl and Fullan (2003) illustrate that the process of setting direction and vision for the school requires creating organizational structures that align with and support the school vision. Leithwood, et al. (1999) identify three broadly defined activities associated with the leadership practice of redesigning the organization: strengthening the school culture, modifying the organizational structure, and building collaborative processes. Briefly, culture is the set of common norms, beliefs, and values that govern the way a group of people interact with each other (Deal & Peterson, 1999). School culture is the set of values that govern relationships and behavior among students, teachers, and the community that affect the attainment of school goals (Pashiardis, 2000). The school climate or culture has an influence on student outcomes and school effectiveness (Cobb, et al., 2003; Dorman, 2001; Pashiardis, 2000). School leaders obtain teacher commitment and enhance teacher performance by developing shared norms, values, and attitudes among the school staff (Leith & Reihl, 2003).

School leadership is responsible for establishing organizational structures that create positive and equitable conditions for teaching and learning (Sergiovanni, 2000). School level operating procedures can facilitate or inhibit organizational performance, depending on how well procedures align with the cultural norms of the organization. In an enabling organizational structure, trusting relationships between teachers and principals reduce role conflict by

minimizing a strict authoritative hierarchical structure (Hoy, 2003). Teachers and principals work collaboratively across hierarchical boundaries while retaining professional autonomy to maintain the instructional mission of the school. Policies and procedures serve as a guide to problem solving rather than restricting activity or authority. Hoy describes enabling structures as flexible organizations that foster trust, value differences, enable cooperation and innovation, view problems as opportunities, learn from mistakes, and anticipate the unexpected. Specific school level operational procedures that define the organizational structure are the evaluation methods of students and teachers, ceremonies and assemblies for rewarding and recognizing student and teacher accomplishments, processes for the distribution and sharing of resources, and the development of a school schedule (Deal & Peterson, 1999; Maehr & Midgley, 1996). Hoy notes that enabling organizational structures remain flexible and adapt to changing conditions and context. Without a mindful leader continually attentive to changes in the social and physical environment, there is a risk of organizational complacency. Without a mindful leader willing to initiate change, rules, procedures, and practices may not be adapted to the norms or objectives within a changing school context.

When leaders create collaborative processes, teachers are provided opportunities to participate in decision making about issues that affect their working environment (Irwin & Farr, 2004). In a study of organizational performance and academic achievement, Van Der Westhuizen, Mosoge,

Swanepoel, & Coetsee (2005) found that participation in the decision making and management of the school by students, teachers, and parents, was high in well- and average-performing schools and low in poorly performing schools.

Professional school climates where teachers participate in decision making, reinforce teachers' belief that they have control over their work environment and that they are respected by their colleagues (Sergiovanni, 2000). In their case study of improving the performance of challenging schools, Jacobson et al. (2005) found that the more successful principals created structures and schedules that facilitated collaboration and teamwork. All stakeholders and constituents of a school were represented on interconnected executive boards and advisory committees, and participated in democratic procedures and functions. Contrary to Jacobson et al., Sergiovanni, and Van Der Westhuizen, et al., D'Agostino (2000) found in his development of an organizational commitment model of effective schools that teacher participation in decision making was a negative predictor of student mathematic scores. Because he found a positive relationship between social support and a shared mission among faculty and student mathematics scores, D'Agostino suggested that the negative prediction of decision making on student mathematic scores may be an indication of teachers' lack of time to engage in decision making beyond the planning of teaching and instructional activities.

In a qualitative study of collaborative reform efforts, Straham (2003) observed that when structured opportunities for interaction are put in place (such

as collaborative planning sessions or grade level meetings), teachers begin to set school goals and priorities by using student assessment data to identify areas of needed improvement. In his study of teachers' perception of organizational climate and leadership style, Chirichello (1999) concluded that transformational leaders provide regularly scheduled times for professional development, collective governance, and collaborative and participatory planning of instruction that involves the entire school staff.

*Developing people.*

In Leithwood's model of educational transformational leadership, terminology from the Full Range Leadership model by Bass and Avolio is used to name leadership behaviors under the practice of developing people. The leadership behavioral practices of developing people outlined by Leithwood, et al. (1999) are providing individualized support, developing an intellectually stimulating environment, and modeling behavior and practices important to the school.

In case studies of vision in schools, Barnett and McCormick (2003) noted that a school principal who exhibits concern for teacher welfare and who provides support for individual teacher interests, gains greater support from the staff. Leadership behaviors perceived by teachers as supportive include being accessible (an open-door policy), treating all members of the faculty fairly, and recognizing and rewarding hard work and accomplishments. Lucas and Valentine (2002) observed in their study of leadership and school culture that teachers were

more willing to experiment with different instructional approaches when they perceived a trusting relationship with the principal. Lucas and Valentine also found a relationship between teachers' perception of leaders' individual support behaviors and faculty and administrators working toward a common school mission. Leithwood, et al. (1999) suggest that individually supportive behavior may be motivational by assuring teachers that help and understanding will be available during the process of changing instructional practice.

Leadership practices that promote intellectual stimulation, challenge teachers to re-examine current teaching practices and to explore new ways of presenting curricular content (Leithwood, et al., 1999). Drago-Severson (2000), in her ethnography of leadership practices and teacher development, elaborated on one principal's initiatives aimed at supporting teacher learning. The initiative included three components: shared and inclusive leadership, building school community, and embracing change and diversity. The principal created an organizational structure that allowed teachers to perform different functions in the school to address school issues and work. To build the school community and promote diversity in thinking, the principal employed a practice of teaming. Teaming provided the opportunity for school faculty to serve in leadership roles with the support and mentoring of the principal. Teaming also raised consciousness and diversity in thinking by providing a safe context to share alternative viewpoints.

Leithwood and Reihl (2003) suggest that principals set examples for staff by modeling practices consistent with the vision and mission of the school. This notion is supported by Lucas and Valentine's (2003) study of school leadership and culture. Where principals provided an appropriate model of collaborative leadership, teachers followed the model set by the principal. By participating more in the decision making on issues that affected the school and the work environment, teachers cultivated a stronger "sense of ownership" in the school program.

*A Theoretical Model for the Individual Consideration Practices of Transformational Leadership*

In their qualitative study of the development of school vision, Barnett and McCormick (2003) concluded that the creation of a school vision requires a collaborative process that synchronizes the personal goals of the teaching staff with the school goals. Barnett and McCormick (2004) later argued that individual concern behaviors of leadership impact the attitudes of school staff toward pursuing a vision. In their study of leadership and school culture, Barnett and McCormick used structural equation modeling to describe the relationship between leadership variables and school culture. From their study, Barnett and McCormick suggest that to unite a staff behind a school vision, a principal must develop a trusting relationship with teachers and involve them in the creation of the school vision. In the study, a principal who was perceived by teachers as individually considerate exhibited more than just helpful behavior toward

teachers. A principal perceived by teachers as individually considerate was one who provided direction and guidance to individual staff members. Based on the personal goals of staff members, the principal identified specific areas for his or her personal growth. In conjunction, a principal perceived by teachers as visionary was one who clearly articulated a vision of quality teaching and high performance. Results from Barnett and McCormick's study on leadership and school culture revealed that individual concern behaviors have a positive direct effect on visioning; a school vision has a positive direct effect on teaching.

In a study by Alan Barnett (2003) on the relationship between the transformational and transactional leadership behavior of school principals, teacher outcomes, and school learning environment constructs, one of the most significant findings was that principals' individually considerate behavior was more influential than visioning on teacher perceptions of the learning environment. While both individual consideration and visioning were found to have a significant relationship with teacher outcomes, teachers were motivated more by the care and individualized concern shown to them by their leader rather than by having their aspirations motivated and elevated by a vision. While Barnett suggested that this finding minimized the significance of setting direction and creating a vision emphasized in previous leadership studies (See Hallinger, 2003; Hallinger & Heck, 1998; Teddlie & Stringfield, 1993; Witziers et al., 2003), his results may have other implications regarding the relationship between

the individual consideration practices and setting direction practices of school leadership.

Hallinger (2003) conceptualizes transformational leadership as a building block of leadership processes aimed at coordinating staff behind a unified direction. Hallinger's model is grounded in the assumption that the core of organizational effectiveness is the development of individuals. Under Hallinger's conceptualization of Leithwood's model of educational transformational leadership, individual consideration is viewed as the foundation of all other behavioral practices of leadership (Hallinger, 2003; Marks & Printy, 2003). Hallinger suggests that to set the direction and mission of the organization, school leaders must understand the needs of individual staff in order to obtain support and to meet school goals. Hallinger contrasts the transformational model of leadership and the directive, "top-down" approach of instructional leadership. The instructional leadership model emphasizes the control and regulation of the teaching activities of staff to meet desired expectations. Whereas, "the [transformational] model seeks to influence people by building from the bottom-up rather than from the top down" (Hallinger, 2003, p. 337).

The research by Barnett (2003), Barnett and McCormick (2003, 2004), and the model by Hallinger (2003) suggests that the individual consideration behaviors of school leaders are necessary in order to successfully set the direction of the organization. Jacobson et al. (2005) also note that the principals' ability to influence people in the visioning process is enhanced by the relationships that

they create with faculty, students, and parents. In their case study, Jacobson et al. describe the enabling practices of caring school principals in seven challenging but successful schools. To meet the long-term goals for professional performance and student success, principals observed in the study responded to the individual needs and development of teachers on a daily basis. By creating a nurturing positive school culture, principals gained the support of the faculty. Faculty reciprocated the positive, supportive behavior by working with the principal to develop school goals and objectives. Hoy (2003) reached similar conclusions in his study on enabling school structures. In an enabling school structure, teachers described the principal as supportive and collegial. “The principal had an open door policy, and she cared for teachers and respected their professional expertise. She would not and did not tell teachers how to get the scores up” (Hoy, 2003, p. 92).

In their study of leadership and school culture, Lucas and Valentine (2002) suggest that the individually considerate behaviors of the principal affect the commitment and leadership development of faculty members. Using survey and interview data from twelve middle schools in a school improvement program, Lucas and Valentine captured the principal’s role in supporting teacher innovation and productivity to accomplish school goals. Interview data describes teachers’ perception of the principal’s behavior that cultivates teacher development and motivation:

I think it's to [the principal's] credit that he pushed so we could get the best that we can from these kids. If you hear or see something or bring in some research and want to try it out, you are encouraged to. We experiment. (Lucas & Valentine, p. 17)

The work of Leithwood and others highlights the practices of educational transformational leadership that influences school culture by setting the direction and organizational goals of the school (Hallinger, 2003; Hallinger & Heck, 1998; Jacobson et al., 2005; Leithwood et al., 2004; Leithwood, et al., 1999; Leithwood & Reihl, 2003; Teddlie & Stringfield, 1993; Witziers et al., 2003), creating school structures that complement the positive shared norms, cultural values and attitudes of the organization (Chirichello, 1999; Deal & Peterson, 1999; Hoy, 2003; Jacobson et al., 2005; Maehr & Midgley, 1996; Sergiovanni, 2000; Straham, 2003), and providing a model of appropriate behaviors for a collaborative professional school culture (Jacobson et al., 2005; Leithwood & Reihl, 2003; Lucas & Valentine, 2002). As described in chapter one, an aspect of the school culture that positively impacts the instructional practices of teachers is a cohesive, collaborative professional environment that promotes a high degree of involvement among teachers in the decision making and in the development of school goals (Cobb, et al., 2003; D'Agostino, 2000; Dorman, 2001; Hopkins, et al., 1994; Irwin & Farr, 2004; Pashiardis, 2000; Stockard & Mayberry, 1992). Hallinger's conceptualization of transformational leadership models the notion

affirmed by other educational research (Griffith, 1999; Hallinger, et al., 1996; Hallinger & Heck, 1998) that the impact of leadership on student outcomes is a second-order effect mediated by the school culture and organizational climate.

Despite the programmatic study of educational transformational leadership over the past decade, the individually considerate behavioral practices conceptualized under Hallinger's model are still speculative and described in general terms. Further refinement of Hallinger's model is needed to determine if the individually considerate practices of school leadership serve as a foundation for other transformational leadership behavioral practices besides setting direction. There is ample evidence that confirms the important role of the principal in creating a productive school culture; there is little direct evidence that describes the individually considerate practices of leadership that influence the collaborative and professional cohesiveness of the school faculty.

### *Summary*

This study attempts to move beyond the broad conceptualization of transformational leadership practices that influence the school culture and to identify the specific individual consideration practices of school leadership that influence the professional relationships among faculty. The premise of the study is that it is the transformational leadership behaviors of the school principal that most strongly influence the school culture and, likewise, teacher productivity and student learning. The literature review has depicted the conceptualization of transformational leadership with the aim of pinpointing the placement of

individual consideration practices within a model of educational transformational leadership.

Because the individual consideration practices may be the foundation for other transformational leadership practices that influence organizational effectiveness, individual consideration practices merit further study. Chapter three describes the methodology used to study the relationship between teachers' perception of the individually considerate transformational practices of school leaders and a collegial, cohesive climate among the teaching faculty in high performing schools. Chapter four provides the results of the data collection and the statistical procedures for conducting the study. Chapter five offers conclusions drawn from the results of the study and provides recommendations for future research.

## Chapter Three

### Methodology

In the late 1970s and early 1980s, educational researchers consistently identified common characteristics of effective schools integral to the high performance of students. Numerous researchers proposed various lists of effective school factors that generally centered on strong administrative leadership, high expectations for student achievement, an orderly atmosphere conducive to learning (school climate), an emphasis on basic skill acquisition, and frequent monitoring of student progress (Brookover & Lezotte, 1979; Edmonds, 1979; Purkey & Smith, 1983). Edmonds (1979), in his study of unusually effective schools for the urban poor, suggests that both the climate and the leadership of the school are critical to student academic achievement.

This study uses data from a survey on effective schools to explore the relationship between leadership and the school culture. In particular, the professional culture and peer cohesiveness of school faculty at successful schools is explored. Teachers at schools in North Carolina where 80% or more of the student body have performed at or above grade level for four consecutive years on state standardized tests were surveyed on the five correlates of effective schools. This study uses data collected from questions in the survey regarding school climate and leadership to investigate the relationship between the transformational leadership practice of individual consideration and the school climate factor of peer cohesion among school staff. Specifically, the study explores the

relationship between teachers' perception of the importance of the individual consideration practices (support of school staff members and development of staff members' leadership potential by school leaders) and teachers' perception of the importance of a collegial, cohesive climate among teaching staff at successful schools in North Carolina. Data was collected at the teacher level. Multiple regression analysis is used to test the hypothesis that a relationship exists between teachers' perceptions of the individually considerate practices of leadership and teachers' perception of peer cohesion among school staff.

### *Sample*

Hallinger and Heck (1998), and Hallinger et al. (1996) observe that the influence of school leadership on student academic achievement is mediated by the culture of the school. To determine if there was a relationship between school leadership practices, the professional organizational climate, and student academic performance, the population for the study was identified as successful schools under the North Carolina ABCs Accountability model. The North Carolina ABCs Accountability (North Carolina Department of Public Instruction, n.d. a) data was used to identify effective schools in North Carolina. On the basis of student performance on end-of-course tests, students were identified as Achievement Level I, II, III, or IV. Schools are considered as Schools of Excellence or Schools of Distinction if 80% or more of their students are performing at or above Level III (consistent mastery of subject/course content matter).

Given the concern for stability of test scores across years in effective schools (Crone, Lang, Teddlie, & Franklin, 1995), paramount to the study was the identification of schools that have maintained a high level of effectiveness over consecutive years. The ABCs test data was used to identify all schools that have been Schools of Distinction or Schools of Excellence for four consecutive years. During North Carolina's 2003/2004 school year, 482 schools had 80% or more of their students perform at or above Achievement Level III on standardized end-of-course tests for four consecutive years (2000/2001, 2001/2002, 2002/2003, 20003/2004) (North Carolina Department of Public Instruction, n.d. a). Of the 482 schools identified, seven were removed from the sample: four schools participated in the pilot study, two schools were removed from the sample due to a school merger, and one school was removed due to researcher conflict of interest. Principals at the 475 schools identified were contacted by a formal letter requesting their permission for teacher participation in the study. The study required teachers to complete an online survey.

An online survey on teachers' perception of the presence and importance of effective schools variables served as the primary method of data collection. On May 5, 2005, every principal of the 475 schools identified in the sample was mailed a letter requesting permission for teachers to participate in the study. Where required by school district policy, contact was made with district level personnel requesting permission to conduct the study in the school district. The survey remained online until June 15, 2005. At the request of school principals,

the survey was reopened for two weeks in August of 2005. During the data collection procedure, a response was received from seven percent of the 475 schools contacted.

### *Description of Sample*

Two sample sets apply to this study: the sample for the pilot study during survey construction and the sample used in the analysis of peer cohesion and leadership. To construct the survey instrument, 80 responses were received from four schools that were selected to participate in the pilot study. The four schools that participated in the pilot survey were not provided the opportunity to participate in the final study.

A total of 96 teachers from 33 schools responded to the survey. Of the 96 responses, 41 were from five middle schools, one high school and one kindergarten through grade eight school configuration. Because only five or fewer schools from a grade-span configuration were represented, those 41 responses were removed from this study. This study uses the 55 responses from 26 elementary schools to explore the relationship between teachers' perception of the importance of leadership practices and teachers' perception of the importance of peer cohesion.

### *Instrumentation*

The 50 item Effective Schools Survey was designed to measure teachers' perceptions about the five correlates of effective schools. Scale construction underwent three phases: Initial survey construction, a panel review and a pilot study.

#### *Initial survey construction.*

A multitude of surveys on effective schools have been constructed with similar lists of characteristics of effective school constructs (See Carter & Michael, 1999). Survey items for this study were identified by reviewing research literature related to effective schools. The works of Edmonds (1979), Levine and Lezotte (1990), and Cotton (2000) served as the primary conceptual basis for the construction of the instrument. The Effective Schools Survey provides data on basic skills instruction, school climate, monitoring of student progress, expectations of students, and school leadership.

The original pilot survey lists 75 items identified from the literature as effective school characteristics. The characteristics were measured on two scales: presence and importance. The original survey design incorporates an ordinal Likert scale with four categories for presence: "Strongly Disagree" (weighted 1) to "Strongly Agree" (weighted 4). Respondents were asked to indicate their perception of the presence of each item as a practice in their school. The respondent's perception of the importance of the effect of this variable on overall

student achievement in a school was rated on a 4-point scale ranging from “Not Important” ( 1) to “Important” (4).

*Panel review.*

Prior to use in the pilot study, the initial 75 survey instrument was submitted to a panel review to determine content validity. Content validity determines the extent to which an instrument measures a specific construct (Litwin, 1995). It is a subjective measure of how appropriate instrument items seem to various reviewers with some background in the subject matter. It is not a numerical measure.

The review team consisted of a school district testing director with a Ph.D. in education, two school district technology directors, four teachers, one state education agency consultant with a Ph.D. in library science, and one research practitioner with a Ph.D. in educational research. Each panelist received a survey validation form to review the instrument format and content. The Effective Schools Validation form is listed in Appendix A. On the form, panelists were asked to note unclear items, typographical errors, grammatical errors, and any suggestions for improvement. Panelists were also asked to estimate the time to complete the survey online.

The 75 item survey instrument was posted online for panel review. The survey instrument met overall approval by the panel. The general response by the panelists was “The survey was very easy to use and clear.” Input by the panel consisted mostly of suggestions for rewording certain questions for clarity.

Estimated time to complete the survey ranged from 10 to 45 minutes. Based upon this review, a revised format of the instrument was developed and used in the pilot study. The suggestions made for improving item clarity were incorporated into the survey.

*Pilot study.*

A pilot study was conducted to assure validity and to further refine the survey instrument. The pilot study was conducted in March and April of 2005. The pilot study included four schools from the population. Principals at the four schools were contacted by a school district administrator requesting school participation in the study. Each principal announced the survey to the school staff at faculty meetings and through electronic mail. Teachers at each school were provided the web site address to access the survey. A total of 80 teachers from the four schools participated in the pilot. Additionally, teachers were asked to provide any comments on the administration of the test to the district level contact.

Three general observations were reflected by the comments of the pilot participants:

- Taking the survey was time-consuming
- The web design of the survey required participants to read through too many screens
- The scale for importance needed to be wider.

Based on the above observations, changes were made to the survey instrument. The survey was reduced to fifty items. The number of online screens for the survey was reduced to five screens. The scale for the importance of an effective school variable was expanded to a selection of one (not important) to six (very important).

*Reliability: Internal consistency.*

Reliability is an indication of the dependability and accuracy of the data obtained (consistency of the measurement) (Anderson & Bourke, 2000). The degree to which an instrument measures the construct it was intended to measure is validity. The most common method of determining scale reliability is to calculate the correlation coefficient between each instrument item (Anderson & Bourke, 2000). As a measure of internal consistency, or homogeneity, Cronbach's alpha was used to determine scale reliability from the pilot study. Table 3.1 presents the arrangement of survey items to represent the components of effective schools. Responses to items comprising each presence and importance scale showed adequate reliability for the five effective school scales: basic skills instruction, school climate, monitoring of student progress, expectations of students, and school leadership. Cronbach's  $\alpha$  ranged from 0.74 to 0.94. Presence/Importance item-total correlations ranged from 0.57 to 0.86,  $p < .01$ .

The construct of teachers' perception of peer cohesion, the dependent variable for the study, was assessed by three questions on school climate from the

Effective Schools Survey. The three questions that assessed the peer cohesion construct were teachers' perception of the importance that

1. Teachers work together to coordinate the instructional program at each grade level
2. The faculty discuss major decisions that effect the school
3. Staff members see themselves as part of the school family

A respondent's answers to the three items were summed to arrive at a composite scale score reflecting the respondent's perception of the importance of peer cohesion in the effectiveness of his/her school.

Table 3.1. Number of survey items for each scale and scale reliability

Scales/Sample items	Number of items	Cronbach's $\alpha$		Presence/Importance Correlation
		Presence	Importance	
Basic Skills Instruction	8	0.74	0.89	.66**
Monitoring of student progress	7	0.87	0.90	.80**
Expectations for students	10	0.85	0.91	.78**
Leadership	12	0.93	0.94	.62**
School Climate	13	0.79	0.90	.42**
Peer cohesion	3	0.37	0.70	.35**

\*\*  $p < .01$

Table 3.1 presents the reliability scores for the peer cohesion construct. The peer cohesion construct showed an adequate Cronbach's  $\alpha$  of 0.70 on the importance scale with a presence/importance item-total correlation of .35,  $p < .01$ . For peer cohesion, the presence scale did not reveal internal reliability with a Cronbach's  $\alpha$  of 0.37.

### *External Validity*

External validity refers to the extent to which the results of a study can be generalized to and across populations. The larger the sample size of a study, the less likely there will be a discrepancy between the characteristics of a population and the sample studied (Montez, 2003). Nonresponse error occurs when those from the selected sample that choose not to respond to a survey differ from those who do respond to a survey. Dillman (1991) suggests that when respondent characteristics are representative of nonrespondents, low rates of return are not biasing. Those who respond to a survey may not differ in any measurable way from those who do not respond. Dillman recognizes that the usual reason that survey research is undertaken is to ascertain selected population characteristics. Therefore, it is usually difficult to compare sample respondents with nonrespondents on the variables being studied.

One recommended method of controlling for nonresponse error is to compare respondents to the population on characteristics known in advance of the study (Dooley & Lindner, 2003). Table 3.2 lists the demographics of the schools in the population and in the sample. The Free and Reduced Lunch percentage (an

indicator of SES) and the percent of minority students are slightly higher for the sample used in this study than the population (five and two percentage points, respectively). The data in Table 3.2 is limited demographic information and does not describe individual characteristics of the respondents. However, the data does indicate that the school demographics of the sample, with slightly higher percentages, are representative of the school demographics from the population.

Table 3.2 Population and Sample Demographics Based on 2002/2003 School Year

	School N=	Number of Teachers responded	Free and Reduced lunch Average*	Minority Average*
Population	482		37.53	22.41
Responses	33	96	39.56	21.41
Elementary Responses	26	55/53	42.92	24.43

\*Data from the North Carolina Department of Public Instruction. (n.d. b) number is percentage of students

### *Data Collection*

Data was collected through an online survey posted for response May 5, 2005-June 15, 2005. A second opportunity to participate in the survey was provided for two weeks in August, 2005. This study used only the responses received from elementary school teachers.

### *Variables Analyzed*

Data for the dependent variables was obtained through a survey of teachers from schools that had been identified in the sample as successful for four

consecutive years. The 50 questions were identified as variables associated with the five correlates of effective schools (leadership, school climate, basic skills instruction, monitoring student progress, and expectations of students). For each question, teachers were asked to measure two constructs: the presence of the variable in their school and the importance of the variable on the academic success of the school. The Effective Schools Survey Instrument is located in Appendix B.

For this study, the desired outcome was to determine if there is a relationship between teachers' perception of the importance of the individually considerate transformational leadership practices of school leaders, (support of school staff members and development of staff members' leadership potential) and teachers' perception of the importance of a collegial, cohesive climate among teaching staff in high performing schools. Responses to three questions from the Effective Schools Survey instrument were used to measure the construct of peer cohesion and responses to two questions were used to measure the individual consideration dimension of transformational leadership.

The construct of teachers' perception of peer cohesion, the dependent variable, was assessed by three questions on school climate. The three questions that assessed the peer cohesion construct are listed in Table 3.3. A given respondent's answers to the three items were summed to arrive at a composite score that reflected the respondent's perception of the importance of peer cohesion in the effectiveness of his/her school. Scores on this variable could

range from 3 to 18 with the higher values indicating a higher importance placed on peer cohesion in the effectiveness of his/her school.

Teachers' perceptions of two behaviors of the individual consideration practice of transformational leadership were the independent variables. As the independent variables, the school leadership practices are second-order effects. School leaders impact the instruction of students by influencing teacher practice and organizational climate. Developing staff members' leadership potential and exhibiting supportive behavior, the two independent variables, were assessed by two questions on leadership. The two questions that assessed the supportive behavior of school administrators and developing staff members' leadership potential are listed in Table 3.3. Scores on the two variables could range from 1 to 6 with the higher values indicating a higher importance placed on supportive behavior by school administrators and developing teacher leadership potential by the school principal in the effectiveness of his/her school.

### *Analysis*

Multiple regression analysis is used to test the hypothesis that a significant relationship exists between the independent variables (the support of administrators of school staff and the cultivation of the leadership potential of staff members by the principal) and the dependent variable, peer cohesion. While regression analysis does not imply causality, it does provide information on the strength ( $r$ ) of a relationship between interval variables. An F statistic is used to

determine if there is a significant relationship between the dependent variables and the independent variable. Significance is defined with an alpha level  $p < .05$ .

A probability model ( $Y_i = \beta_0 + \beta_1 x_i + e_i$   $i = 1, 2, \dots, n$ ) is utilized to study how the value of the dependent variable of peer cohesion changes according to the value of the two independent variables of individual consideration. The basic model used for addressing the question in this study is

$$Y_i = \beta_1 x_1 + \beta_2 x_2 + e_i$$

where

$Y$  = the respondents score on peer cohesion

$\beta_1$  = the nonstandardized regression coefficient for the variable supportive behavior

$X_1$  = a respondents score on administrative supportive behavior

$B_2$  = the nonstandardized regression coefficient for the variable leadership potential

$X_1$  = a respondents score on leadership potential

$e_i$  = intercept constant

Table 3.3. Effective school survey questions used in the study of teachers' perception of peer cohesion and leadership

**Dependent variable: peer cohesion**

Teachers' perception of peer cohesion was determined by creating a composite score from respondent's answers to the three following questions:

1. Teachers work together to coordinate the instructional program at each grade level
2. The faculty discuss major decisions that effect the school
3. Staff members see themselves as part of the school family

**Independent variables**

Teachers' perception of the individual consideration dimension of school leadership was determined from respondent's answers to two questions:

1. School administrators behavior towards the staff is supportive and encouraging
2. The principal cultivates the leadership potential of every staff member

Multiple regression techniques provide an indication of the effects of each independent variable upon the dependent variable. F-tests are used to test if the independent variables account for a significant amount of variance in the dependent variable from the full regression model. The F value determines if there is a significant difference between the  $R^2$  value of the full regression model and the  $R^2$  value of the regression model without one of the independent variables (Hatcher & Stepanski, 1994). A significant difference in the variance of the dependent variable by each independent variable is determined at an alpha level  $p$

< .05. The uniqueness index for the independent variables is determined by the following formula:

$$F = \frac{(R^2_{full} - R^2_{reduced}) / (K_{full} - K_{reduced})}{(1 - R^2_{full}) / (N - K_{full} - 1)}$$

Where

- $R^2_{full}$  = the obtained value for  $R^2$  for the full multiple regression equation with both independent variables
- $R^2_{reduced}$  = the obtained value for  $R^2$  for the multiple regression equation without one of the independent variables
- $K_{full}$  = the number of independent variables in the full multiple regression equation
- $K_{reduced}$  = the number of independent variables in the reduced multiple regression equation
- $N$  = the total number of respondents in the sample.

All statistical procedures were performed using SAS software, version 9.1.3. For conducting multiple regression analysis, the SAS procedure PROC REG estimates the multiple regression coefficients for the independent variables, calculates  $R^2$ , and conducts a significance test of  $R^2$  (Hatcher & Stepanski, 1994). The degree of multicollinearity, or the correlation between two or more independent variables was determined by variance of inflation and tolerance coefficients. For tolerance, a value > .4 is considered an acceptable weak correlation. For variance of inflation, a value < 4 indicates an acceptable small degree of correlation between the independent variables.

### *Summary*

The purpose of this study is to explore the relationship between teachers' perception of individual consideration practices of school leadership and the peer cohesiveness among school faculty in high performing schools. Chapter three has described the methodology of this study, including the sampling procedure, instrumentation and the method of analysis. Chapter four will provide the results of the data collection and the statistical procedures introduced in this chapter in order to analyze the collected data. Summary tables and charts will illustrate correlations and reflect the results of the analysis regarding the relationship between peer cohesion of school faculty and the leadership practice of individualized consideration in high performing schools. Finally, conclusions regarding the results of the study will be discussed in chapter five.

## Chapter 4

### Results

The purpose of this study is to test the hypothesis that a relationship exists between teachers' perception of the importance of individually considerate transformational practices of school leaders, (support of school staff and the cultivation of staff members' leadership potential) and teachers' perception of the importance of a collegial, cohesive climate in high performing schools. This research is based on a survey conducted during the spring of 2005 that examines teachers' perception of the importance of selected effective school variables in basic skills instruction, high expectations, monitoring of student progress, leadership, and school climate at schools that have been high performing under the North Carolina ABCs Accountability program. This study uses selected variables from the school climate and leadership scales of the survey to study the relationship of teachers' perception of the importance of the individually considerate transformational practices of school leadership and teachers' perception of the importance of a cohesive climate among school staff in high performing schools.

Chapter four provides the details of data screening and data analysis. Data was inspected for assumptions of normality, multicollinearity and outliers. Descriptive statistics, bivariate and multivariate associations are used to determine if a relationship exists between the criterion variable of teachers' perception of the importance of peer cohesion and the predictor variables identified as teachers'

perception of the importance of the transformational leadership variables, leadership support of school staff and the cultivation of staff members' leadership potential. Multiple regression techniques provide an indication of the effects of each independent variable upon the dependent variable. F-tests are used to test if the independent variables account for a significant amount of variance in the dependent variable from the full regression model. With a significance level set at an alpha  $p < .05$ , the predictor variables demonstrate a relationship with the criterion variable.

#### *Data Assessment/Screening*

Prior to analyzing the data, peer cohesion, administrative support of school staff and cultivation of leadership of staff variables were examined for accuracy of data entry, missing values and fit between distributions and assumptions of bivariate and multivariate analysis. Descriptive statistics of the sample responses provide the range, mean, standard deviations, and minimum and maximum scores for each variable analyzed. Measures of skewness and kurtosis were also calculated to assess the distribution of each variable response set. Table 4.1 summarizes the descriptive statistics of the data, including values for skewness and kurtosis. Examination of the minimum and maximum scores for each variable indicates accurate data entry. An  $N=55$  indicates no missing variables.

Table 4.1. Summary statistics for criterion and predictive variables

Variable	N	Mean	Standard Deviation	Minimum	Maximum	Kurtosis	Skewness
Peer Cohesion	55	16.78	1.82	10.00	18.00	5.32	-2.12
Administrative Support	55	5.76	0.79	1.00	6.00	24.91	-4.64
Leadership Potential	55	5.44	0.79	3.00	6.00	0.52	-1.20

Descriptive statistics for the current sample (N=55) found mean scores for peer cohesion of 16.78 (SD = 1.82), for administrative support of 5.76 (SD = .79), and for cultivating leadership potential of 5.44 (SD = .79). Skewness and kurtosis values for each variable were calculated to test for normality. Skewness estimates are -2.12 for peer cohesion, -4.64 for administrative support of staff, and -1.20 for cultivating leadership potential of school staff. An absolute value of 2.00 or greater in magnitude is considered an extreme skew score (Lomax, 2001). A significant negative skew is noted for peer cohesion and administrative support and a moderately acceptable skew score is noted for cultivating the leadership potential of school staff. The negative scores indicate that there are relatively few small values in the sample data for the three variables. Kurtosis estimates for peer cohesion are 5.32, 24.91 for administrative support of school staff, and .52 for cultivation of leadership potential. Data for cultivating leadership are normally distributed, but peer cohesion and administrative support of school staff data have leptokurtic distributions.

Given the skewness and leptokurtic distributions for two variables, the data was examined for outliers. Two cases from the sample have scores on the dependent variable of peer cohesion that fall outside three standard deviations

from the mean (16.78) and have been excluded from the study. Table 4.2 lists the descriptive statistics of the data after the two outliers are removed.

Table 4.2. Summary statistics for criterion and predictive variables where N=53\*

Variable	N	Mean	Standard Deviation	Minimum	Maximum	Kurtosis	Skewness
Peer Cohesion	53	17.04	1.27	14.00	18.00	-0.07	-1.07
Administrative Support	53	5.89	0.38	4.00	6.00	13.32	-3.57
Leadership Potential	53	5.51	0.70	4.00	6.00	-0.06	-1.10

The estimates of skewness and kurtosis were examined a second time after outlying data were removed. Skewness estimates are -1.07 for peer cohesion, -3.57 for administrative support of staff, and -1.10 for cultivating leadership potential of school staff. A significant negative skew is noted for administrative support and an acceptable skew score is noted for cultivating the leadership potential of school staff and for peer cohesion. Kurtosis estimates for peer cohesion are -.07, 13.32 for administrative support of school staff, and -.06 for cultivation of leadership potential. Data for cultivating leadership and peer cohesion are normally distributed but administrative support of school staff data maintains a leptokurtic distribution. Because the range in scores for the variable of administrative support is small and data transformation has little effect on the skewness, no further diagnostics were undertaken. Although a normal distribution is ideal, multiple regression is a robust statistic and will withstand

violations of assumptions (Tabachnick & Fidell, 2001). Results of analyses with the administrative support data, however, should be interpreted cautiously.

To check for multicollinearity, bivariate associations among the two predictor variables were examined (N=53). Bivariate associates appear in Table 4.3. The two predictor variables have a correlation of .08 ( $p < .58$ ). A tolerance value = .99 and a variance of inflation value = 1.06 confirm the unlikelihood of multicollinearity between the two predictor variables.

Table 4.3. Bivariate associations for criterion and predictive variables

Variable	Peer Cohesion	Supportive	Leadership
Peer Cohesion	1.00	.37 (.006)	.43 (.001)
Supportive	.37 (.006)	1.00	.08 (.58)
Leadership	.43 (.001)	.08 (.58)	1.00

N=53, p values are in parenthesis

#### *Data Analysis*

Results were analyzed using both bivariate association and multiple regression. Bivariate analysis indicates a relationship between the predictor individual consideration variables and the criterion variable, peer cohesion. Pearson correlation coefficients appear in Table 4.3. The coefficient of .37 ( $p < .006$ ) indicates a significant relationship between teachers' perception of the importance of administrative support of school staff and teachers' perception of the importance of peer cohesion of school staff. The correlation suggests that with an increase in the perceived level of importance of administrative support of school staff there will be an increase in the perceived level of importance of peer cohesion by teachers. The coefficient of .43 ( $p < .001$ ) indicates a significant

relationship between teachers' perception of the importance of the cultivation of leadership potential of school staff and teachers' perception of the importance of peer cohesion of school staff. The correlation suggests that with an increase in the perceived level of importance of the cultivation of leadership potential of school staff, there will be an increase in the perceived level of importance of peer cohesion by teachers.

Table 4.4. Regression summary of administrative support, cultivating leadership predictors on peer cohesion

	DF	SS	MS	F	R	R <sup>2</sup>	Adj R <sup>2</sup>
Regression	2	25.49	12.74	10.90*	0.55	0.30	0.28
Residual	50	58.44	1.17				
Total	52	83.93					

Note: \*p < .0001

A regression analysis was conducted using both teachers' perception of the importance of administrative support of school staff and teachers' perception of the importance of cultivating staff leadership potential as the independent variables and teachers' perception of the importance of peer cohesion as the dependent variable. Results of the analysis are presented in the ANOVA table in Table 4.4. The linear combination of leadership individual consideration behaviors is significantly related to peer cohesion, as determined by the F statistic. With an  $F(2, 50) = 10.90$ ,  $p < .0001$ , we can accept the hypothesis that a relationship exists between teachers' perception of the importance of the transformational leadership individual consideration practices (support of school staff members and development of staff members' leadership potential) and

teachers' perception of the importance of a collegial, cohesive climate. The sample multiple correlation coefficient  $R = .55$  indicates that approximately 30% of the variance in teachers' perception of the importance of peer cohesion can be accounted for by the linear combination of teachers' perception of the importance of the two leadership individual consideration practices.

Table 4.5. Regression Analysis of the predictor variables administrative support and cultivating leadership on peer cohesion outcome

Variable	Parameter Estimate	Standard Error	Beta Weights <sup>a</sup>		Uniqueness Indices <sup>b</sup>	
			Beta	t <sup>c</sup>	Uniqueness Index	F <sup>d</sup>
Intercept	6.16*	2.56				
Administrative support	1.15**	0.40	0.34	2.88**	0.09	5.93*
Leadership	0.74**	0.22	0.41	3.44**	0.16	10.78**

Notes: N=53

<sup>a</sup> Beta weights are standardized multiple regression coefficients obtained when peer cohesion was regressed on both predictor variables.

<sup>b</sup> Uniqueness indices indicate the percentage of variance in peer cohesion accounted for by the predictor variable.

<sup>c</sup> For t tests that tested the significance of the beta weights  $df = 50$

<sup>d</sup> For F test that tested the significance of the uniqueness index the  $df = 1, 50$

\* $p < .05$

\*\* $p < .01$

The parameter estimates (the nonstandardized regression coefficients) indicate the amount of change in the criterion variable that is associated with a one-unit change in the predictor variable, while holding constant the remaining predictor variables. The nonstandardized coefficients represent the change that

would be observed when the predictor variables have different means and standard deviations. Based on the parameter estimates reported in Table 4.5, the multiple regression equation to indicate the amount of change in teachers' perception of the importance of peer cohesion associated with a change in teachers' perception of the importance of the transformational leadership practices (administrative support of staff and the cultivation of leadership potential of staff) is:

$$Y' = 1.15(\text{Administrative Support}) + .74(\text{Cultivating leadership}) + 6.16$$

Beta weights and uniqueness indices were then determined to assess the relative importance of the two independent variables in the prediction of teachers' perception of the importance of peer cohesion. The uniqueness index for a given predictor variable is the percentage of variance in the criterion variable accounted for by the single predictor variable beyond the variance accounted for by the other predictor variables within the full regression model. Parameter estimates, beta weights and uniqueness indices are presented in Table 4.5.

Both predictor variables, teachers' perception of the importance of the administrative support of school staff and teachers' perception of the importance of the cultivation of leadership potential of school staff, displayed significant beta weights. Teachers' perception of the importance of the transformational leadership behavior of cultivation of the leadership potential of school staff has a somewhat larger beta value at .41 ( $p < .001$ ). The beta weight for teachers'

perception of the importance of the transformational leadership behavior of support of school staff is also significant: .34 ( $p < .001$ ).

The uniqueness index supports the results of the beta weights in that both dependent variables are significant predictors of teachers' perception of the importance of peer cohesion among staff in the overall academic success of the school. Teachers' perception of the importance of the leadership individual consideration practice of administrative support of school staff accounts for approximately 9% of the variance in the peer cohesion variable beyond the variance accounted for by the other predictor variable,  $F(1, 50) = 5.93, p < .05$ . Teachers' perception of the importance of the leadership individual consideration practice of cultivating the leadership potential of school staff accounts for approximately 16% of the variance in the peer cohesion variable beyond the variance accounted for by the other predictor variable,  $F(1, 50) = 10.78, p < .01$ .

## *Summary*

Results of this study presented in chapter four suggest that teachers' perception of the importance of individual consideration practices exhibited by school leaders have a significant correlation to teachers' perception of the importance of peer cohesion for the overall academic success of high performing schools under the North Carolina ABCs Accountability model. Teachers' perception of the importance of cultivating the leadership potential of school staff, and to a lesser extent, teachers' perception of the importance of administrative support of school staff show significance as predictors of teachers' perception of the importance of peer cohesion among school staff. Chapter one of this study presents evidence of the impact of school culture and peer cohesion among staff on school effectiveness and provides a framework for the study of transformational leadership theory within the broader scope of educational leadership. Chapter two of this study provides a model for studying the significance of school leadership practices on school culture and school effectiveness. Leithwood's three transformational leadership practices of setting direction, redesigning the organization and developing people are depicted. Specifically, the individual consideration practices of leadership are conceptualized as the foundation of other leadership practices within Hallinger's transformational leadership model. Chapter five offers a discussion of the significance of the relationship between the individually considerate transformational practices of school leaders and peer cohesion among staff found

in this study. A discussion of the results of this study within Hallinger's model of transformational leadership, and suggestions for future research are included in chapter five.

## Chapter Five

### Conclusions

#### *Introduction*

The purpose of this study is to test the hypothesis that a relationship exists between teachers' perception of the importance of the individually considerate transformational leadership practices of school leaders and teachers' perception of the importance of peer cohesion among school teaching faculty for student achievement at their school. To study the relationship between the transformational behaviors of school leaders and the peer cohesion among school staff, two individual consideration practices of school leaders were identified as predictor variables for the study. The study explores the relationship between teachers' perception of the importance of individual consideration practice in support of school staff members by school administrators and teachers' perception of the importance of a collegial, cohesive climate among teaching staff in high performing schools. The study also asks if there is a relationship between teachers' perception of the importance of the individual consideration practice of the development of staff members' leadership potential by school administrators and teachers' perception of the importance of a collegial, cohesive climate among teaching staff in high performing schools.

In this study, 53 responses from 26 elementary schools to an effective schools survey are used to explore the relationship between teachers' perception of the transformational leadership practices of school administrators and teachers'

perception of peer cohesion among staff members at schools that have been high performing under the North Carolina ABCs Accountability program. Developing teacher leadership potential and exhibiting supportive behavior, the independent variables, are assessed by two questions on leadership in the Effective Schools Survey: “school administrators behavior towards the staff is supportive and encouraging”, and “the principal cultivates the leadership potential of every staff member”. Scores on each variable indicate teachers’ perception of the importance of each variable on the academic achievement of students at the respondent’s school. Scores can range from 1 to 6, with the higher values indicating a higher importance placed on that variable for academic achievement within the school.

The construct of teachers’ perception of peer cohesion, the dependent variable, is assessed by three questions on school climate from the Effective Schools Survey. The three questions that assess the peer cohesion construct address teachers’ perception of the importance that

1. Teachers work together to coordinate the instructional program at each grade level
2. The faculty discuss major decisions that effect the school
3. Staff members see themselves as part of the school family

A respondent’s answers to the three items are summed to arrive at a composite scale score reflecting the respondent’s perception of the importance of peer cohesion in the effectiveness of his/her school. Scores on this variable can range

from 3 to 18, with the higher values indicating a higher importance placed on peer cohesion in the effectiveness of his/her school.

A multiple regression model is used to study the relationship between individual consideration practices of school administrators and the peer cohesiveness among school staff. An F statistic determines if the predictor variables account for a significant amount of variance in the criterion variable. Parameter estimates, beta weights and uniqueness indices are then determined to assess the relative importance of each independent variable in the prediction of teachers' perception of the importance of peer cohesion.

### *Major Findings*

A significant relationship between student achievement and school climate has been found in various educational research. As Deal and Peterson (1999) and Strahan (2003) have observed, a professional culture that focuses on productivity and collegiality can improve staff performance and student outcomes. In analyzing the results of this study, the data indicate that teachers perceive peer cohesiveness among staff as important for overall student achievement in high performing schools in North Carolina. A mean score of 17.04 with a standard deviation of 1.27 on peer cohesiveness (Table 4.2.) shows this overall high teacher perception of importance.

Leithwood and Reihl (2003) note that school leadership has substantial influence on numerous school conditions by modifying organizational procedures, building decision making processes, and shaping the mission of the school. When

the impact of these conditions on student achievement is demonstrated, it can be inferred that leadership exerts an indirect influence on student achievement. The data from this study indicate that, in high performing schools in North Carolina, teachers perceive the administrative support of staff as important for overall student achievement. A mean score of 5.89 with a standard deviation of .38 on the administrative support of school staff (Table 4.2) shows this overall high teacher perception of importance. In a qualitative case study of four schools, Barnett and McCormick (2003) reached similar conclusions in their investigation of teachers' perception of transformational leadership behavior and vision in schools. To create a shared vision, the school administrator promotes collaboration rather than imposing his own vision for the school and ensuring that his vision is followed. Barnett and McCormick found that individually considerate supportive behavior impacts teacher affiliation and promotes collegiality.

Likewise, the data indicate that teachers perceive that the cultivation of leadership potential of staff members by school administrators as important for overall student achievement in high performing schools in North Carolina. A mean score of 5.51 with a standard deviation of .70 on the cultivation of leadership potential of staff members by school administrators (Table 4.2.) shows the overall high teacher perception of importance. In high performing schools in North Carolina, teachers perceive a cohesive faculty and a supportive administration as important for student academic performance. Hallinger (2003)

notes that transformational leadership is founded on the assumption that understanding the needs of individuals within an organization and linking individual needs with the organizational mission will increase teachers' commitment to the school. The transformational leader influences teachers' commitment and develops teachers' skills rather than promoting specific instructional methodologies or procedures to meet desired organizational outcomes. The results of the multiple regression analysis of teachers' perception of the importance of leadership behaviors and teachers' perception of the importance of peer cohesiveness in this study are shown in Table 4.4. The *F* value of 10.90 (2, 5) yields a statistically significant result at alpha  $p < .01$ . Teachers' perception of the importance of the leadership individual concern behaviors, the cultivation of leadership potential of school staff members and administrative support of school staff, together predicts 30% of the variance in teachers' perception of the importance of peer cohesiveness in student academic achievement at their school.

Hallinger's (2003) model of educational transformational leadership is built on the notion that school (organizational) success will occur where transformational leaders create a school climate and conditions that allow staff to continually improve personal skills and to pursue personal goals. The leader's impact on student outcomes is a second-order effect mediated by the school climate and organizational conditions. Hallinger suggests that individually considerate behavioral practices are the foundation for increasing teacher

capacity, thereby, creating a positive learning culture and impacting teaching and learning. Several studies reinforce the conclusion that transformational leadership has an impact on teachers' perceptions of school conditions and teachers' commitment to change by creating enabling organizational structures (Supowitz, 2002; Hoy, 2003), and developing shared norms and values (Leith & Reihl, 2003). Results from this study suggest similar conclusions that support Hallinger's educational transformational leadership model that individual consideration practices such as administrative support of school staff members and the cultivation of leadership potential of school staff members by administrators facilitate a cohesive professional climate, and impact teaching and learning.

In Leithwood's model of transformational leadership, individualized consideration includes both supporting (encouraging, listening, building trust) and developing (intellectual stimulation, leadership potential, embracing diversity) behavioral practices. The regression model shows that the independent variable of teachers' perception of the importance of administrative support of school staff had a significant independent effect on teachers' perception of the importance of peer cohesion. The relationship between the predictor variable and teachers' perception of the importance of peer cohesion is strong, as evidenced by the significant t value ( $t=2.88$ ,  $p < .01$ ) associated with the parameter estimates (1.15). The beta weight and uniqueness index assess the importance of the independent variables relative to the regression model. As determined by the uniqueness

index, teachers' perception of the importance of the individual consideration practice of administrative support of school staff accounts for approximately 9% of the variance in teachers' perception of the importance of peer cohesion beyond the variance accounted for by the other predictor variable. This is consistent with previous research on transformational leadership and school culture by Lucas and Valentine (2002) who found a relationship between principals providing individual support to teachers and teacher collaboration ( $B = .66$ ).

Transformational leadership is described as a form of distributed leadership where school administrators practice behavior that encourages school staff to contribute their own expertise and leadership (Marks & Printy, 2003; Hallinger 2003). Leithwood et al. (1999) note that to develop leadership potential of staff members requires significant support and guidance by school administrators. The regression model in this study shows that the independent variable of teachers' perception of the importance of the cultivation of leadership potential of school staff by administration had a significant independent effect on teachers' perception of the importance of peer cohesion. The relationship between the predictor variable and teachers' perception of the importance of peer cohesion is strong as evidenced by the significant t value ( $t = 3.44$ ,  $p < .01$ ) associated with the parameter estimate (.74). The beta weight and uniqueness index assess the importance of the independent variable relative to the regression model. As determined by the uniqueness index, teachers' perception of the importance of the leadership individual consideration practice of cultivating the leadership potential

of school staff accounts for approximately 16% of the variance in teachers' perception of the importance of peer cohesion beyond the variance accounted for by the other predictor variable. Similarly, Barnett and McCormick (2003) suggest that delegating authority ensures consistency in the vision and goals at different levels within the school. In a study of transformational and shared instructional leaders, Marks and Printy (2003) found mixed results. Of the 13 schools in their study where school leaders scored high on transformational leadership, seven schools scored high on shared instructional leadership between the principal and teachers, whereas six schools did not score high on shared instructional leadership between the principal and teachers.

### *Conclusions*

In their summary of research on school leadership, Leithwood and Reihl (2003) observe that school administrators develop a positive professional community by creating structural conditions for collaboration, modeling collegiality, and developing interaction patterns and behavior. In his attempt to provide an integrated model of instructional and transformational leadership, Hallinger (2003) suggests that school leadership increases organizational outcomes by supporting each teacher's needs and empowering teachers to work interactively in accomplishing high levels of school performance. This study provides preliminary evidence to support Hallinger's theory that the individually considerate behavior of leadership is the foundation for other transformational leadership practices that will improve teacher capacity and organizational climate.

The effects of each transformational leadership individual considerate practice on peer cohesiveness are significant, but generally small: six to eleven percent.

When taken together, teachers' perception of the importance of individually considerate practices of school leadership appear to be significant, explaining 30 percent of the variance in teachers' perception of the importance of peer cohesiveness among the school staff at high performing schools.

If school leaders are able to indirectly impact student outcomes through modification of their own behaviors, the individual consideration practices of support and development need further study. Specifically, the effects of transformational leadership individual considerate practices on teacher capacity and student outcomes needs further exploration to create a complete picture of Hallinger's model of the interaction between leadership behavior, school culture and organizational outcomes.

#### Limitations

Conducting analyses on data from such a select sample provides advantages and disadvantages. Because the sample in this study is teachers from schools considered high performing, it is possible to infer some observations about leadership and peer cohesiveness at high performing schools in North Carolina. Yet as the data indicate, little variation exists in teacher responses on their perceptions of leadership and peer cohesiveness in such a select sample.

From a population of 482 high performing schools under the North Carolina ABCs accountability model, 26 schools participated in this study. Many

of the schools were represented by a single response. The analysis in the study, therefore, must be interpreted cautiously. Clearly, 26 schools and 55 teachers provide a range of insights into leadership behaviors, but limit generalization. These findings should be validated with another larger sample of schools and teachers from a variety of contextual settings.

The low response rate in this research impairs the results and conclusions that can be drawn from this study. Of the 475 schools surveyed, only 26 schools were represented from the sample in this study and often the school was represented by only a single response. While the researcher shows in chapter three that the sample, in general, typifies the school demographics of the population, it cannot be ignored that a response was received from only seven percent of the schools in the sample. The study is susceptible to nonresponse bias.

Although the response rate is quite small, the number of responses did meet generally accepted criteria for using multiple regression as the method of analysis (Hatcher & Stepanski, 1994). The results of this study are by no means conclusive. However, a relationship is found between the dependent and independent variables despite the nonresponse rate and small sample size. The study suggests that the relationship between individually considerate practices of school leadership and the peer cohesion of school faculty merits further study.

Moreover, it is not possible from this study to determine if the perceptions of teachers from high performing schools vary significantly from the perceptions

of teachers from schools not considered high performing. A significant disadvantage in studying a select sample is the inability to determine contextual differences among the schools represented and, consequently, generalize the findings.

Nonetheless, the data permits preliminary investigation in the relationship between individually considerate transformational leadership practices and peer cohesiveness of school staff at high performing schools in North Carolina. The relationship of leadership practices and peer cohesion is an important observation. This finding supports the observation of Hallinger (2003) that individually considerate behaviors of school leaders serve as the foundation for other transformational leadership practices and peer cohesiveness among school staff and validates the need for detailed study.

### Recommendations for future research

In their synthesis of the various methodological approaches to studying school leadership effects, Hallinger and Heck (1996) state

[A]chieving results through others is the essence of leadership. A finding that principal effects are mediated by other in-school variables does nothing whatsoever to diminish the principal's importance. Understanding the routes by which principals can improve school outcomes through working with others is itself a worthy goal for research. (p. 39)

In his study of the relationship between leadership and school climate, Griffith (1999) notes that

future studies should continue direct assessment of principal behaviors in relation to specific schools processes (e.g., the principal's facilitation of collegiality and trust among staff, statement of the school mission, influence on teacher expectations for student learning). (p. 287)

To determine if there is a cause and effect pattern between individually considerate transformational leadership practices, peer cohesiveness of school staff, and student outcomes, reciprocal effects models that account for school context need to guide future research on transformational school leadership practices and school culture. Such research should explore the individually

considerate behavioral practices of school leaders in a variety of contextual settings and in low and moderate, as well as high performing, schools. Specifically, research needs to explore the relationship between school context and school leaders' use of individual consideration practices to improve teacher capacity and leadership potential and the second-order effects of individually considerate leadership practices on student outcomes.

A secondary suggestion for future research is the study of the use of web-based surveys to conduct research. Web-based surveys have potential time-saving and cost-saving advantages. However, sampling issues and nonresponse errors impede the use of online delivery in survey research. Future research needs to explore the implications of technology accessibility and technology literacy of respondents on nonresponse bias, response rates and sampling error.

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## Appendices

Appendix A  
Survey Validation Form

## Effective Schools Survey Validation

Thank you for reviewing the Effective Schools Survey. As you take the survey please note any item where the meaning of the question is not clear to you. Please note any typos or grammar edits or any suggestions you may have for improving the quality of the survey. Also estimate how long it took you to complete the survey. (With the added task of reviewing I realize your time on the survey may be longer than the estimated 15 minutes.)

You will find the survey at [home.nc.rr.com/effectiveschools](http://home.nc.rr.com/effectiveschools). I have asked for contact information in case I have any questions about your comments. Once you have completed the survey please email your comments to me at [atimmerman@nc.rr.com](mailto:atimmerman@nc.rr.com).

Once again, thank you for your time and assistance in this endeavor.

Name: \_\_\_\_\_

Email address: \_\_\_\_\_

Estimated time to complete the survey: \_\_\_\_\_

Below is the title of each screen of the online survey. Add your comments for the screen under the appropriate section.

Demographics:

School Climate (screen 1 of 4):

School Climate (screen 2 of 4):

School Climate (screen 3 of 4):

School Climate (screen 4 of 4):

Basic Skills (screen 1 of 2):

Basic Skills (screen 2 of 2):

Monitoring Student Performance (screen 1 of 2):

Monitoring Student Performance (screen 2 of 2):

Expectations (screen 1 of 3):

Expectations (screen 2 of 3):

Expectations (screen 3 of 3):

Leadership (screen 1 of 4):

Leadership (screen 2 of 4):

Leadership (screen 3 of 4):

Leadership (screen 4 of 4):

OTHER COMMENTS:

Appendix B  
Effective Schools Survey Instrument

Appendix B  
Effective Schools Survey Instrument

North Carolina State University

*Informed Consent Form for Research*

**Examining the correlates of effective schools in varied contextual settings**

Principal Investigator: Annemarie Timmerman

Your school has been recognized as a school of excellence or distinction. As a teacher at a high-performing school, I am asking for your participation in a research study. The purpose of this study is to identify the characteristics of successful schools most strongly correlated to the overall success of its students. Specifically, questions will focus on expectations, school climate, leadership, monitoring of student progress and basic skills instruction.

**Information**

If you agree to participate in this study, you will be asked to complete an online survey, which will take about 15 minutes.

**Benefits**

The results will be utilized to identify the attributes of successful school that have most strongly influenced the high academic performance of its students.

**Confidentiality**

The information collected in the study will be kept strictly confidential. You will not be asked your name in the survey. Only your years of experience as a teacher and the number of years that you have taught at the school will be requested. While only schools that have been identified as high performing schools are asked to participate in the survey, the name of the school at which you teach will be requested in the survey to examine demographic data. No reference will be made in oral or written reports which could link your school to the study.

For record-keeping each survey response will be given an ID Number. Data will be stored securely on a CD-Rom disc independent of any networked or Internet connected servers.

**Contact**

If you have questions at any time about the study or the procedures, you may contact the researcher, Annemarie Timmerman. If you feel you have not been treated according to the descriptions in this form, or your rights as a participant in research have been violated during the course of this project, you may contact Dr. Matthew Zingraff, Chair of the NCSU IRB for the Use of Human Subjects in Research Committee, Box 7514, NCSU Campus (919/513-1834) or Mr. Matthew

Ronning, Assistant Vice Chancellor, Research Administration, Box 7514, NCSU Campus (919/513-2148).

**Participation**

Your participation in this study is voluntary; you may decline to participate in the study. If you decide to participate, you may withdraw from the study at any time by simply closing your web browser. If you withdraw from the study (close your web browser before completion) no data will be recorded.

**CONSENT**

**“I have read and understand the above information. I have received a copy of this form, electronically. I agree to participate in this study with the understanding that I may withdraw at any time.”**

By clicking on the *Effective Schools Survey* button below, you are agreeing to participate in the study and will begin the survey. Thank you for your contribution to this study and to your dedication to the students of North Carolina schools.

## Effective Schools Survey

Please circle the appropriate answer for questions one and two.

1. How many years of experience do you have as an educator?
2. How many years have you taught at this school?

The following questions are strictly used to collect demographic data. The name of your school will in no way be identified in any reports or presentations. However, not completing this question with the correct school name will result in deleting this survey from the study.

3. What is the name of your School?

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4. In what district is your school located?

---

The following pages list various characteristics of schools. Beside each statement, please indicate the presence of this characteristic in your school on a scale of 1 (strongly disagree) to 4 (strongly agree). In the next column, please indicate your perception on the importance of this characteristic for overall student achievement at your school on a scale of 1 (not important) to 6 (very important). To continue to the next page, you must rate each characteristic on both scales before you select the continue button.

	Presence				Importance					
	Strongly Disagree	Disagree	Agree	Strongly Agree	1	2	3	4	5	6
1. Teachers work together to coordinate the instructional program at each grade level										
2. Teachers use instructional strategies which challenge students on their ability level										
3. Effective programs and strategies are in place for students who are in need of remediation										
4. The school is a clean and comfortable facility										
5. The school grading policy is frequently communicated to parents										
6. A school wide discipline policy is consistently enforced by staff										
7. A school wide attendance policy is consistently enforced										
8. The faculty discuss major decisions that effect the school										
9. The school master schedule provides ample planning time for teachers										
10. Grade level teams meet regularly to collaboratively plan										
11. Staff participate in professional development to learn new instructional strategies										
12. Staff members see themselves as part of the school family										

	Presence				Importance					
	Strongly Disagree	Disagree	Agree	Strongly Agree	1	2	3	4	5	6
13. Staff members seek opportunities to maintain technology skills										
14. Technology is used effectively for instruction in the school										
15. There is adequate access to technology to use for instructional purposes										
16. There is a media and technology advisory committee that recommends materials for purchase										
17. Teachers are provided opportunities to select and request instructional print materials										
18. Teachers recommend books for the media center										
19. Instruction is focused on clear, measurable objectives										
20. A written curriculum mapping plan or pacing guide exists at my school										
21. Teachers are encouraged to try research-based instructional approaches to teaching										
22. Both standardized test results and teacher-made tests are used to change and improve the instructional program										
23. Teachers review student performance data to identify gaps in student achievement										

	Presence				Importance					
	Strongly Disagree	Disagree	Agree	Strongly Agree	1	2	3	4	5	6
24. Student's academic progress is monitored and assessed in a variety of ways										
25. Performance standards have been established for measuring the academic success of students										
26. Multiple assessment methods are used to assess student progress (e.g. standardized tests, work samples, teacher made tests)										
27. Teachers provide regular communications with parents on student performance										
28. The principal reviews and analyzes standardized test results with teachers to plan the instructional program										
29. Expectations for student learning are communicated to parents										
30. Expectations for student learning are communicated to students										
31. Teachers hold consistently high expectations for all students										
32. Teachers believe that a student's home background is not the primary factor that determines individual student achievement										
33. Students are given feedback frequently on their classroom and homework assignments										
34. Teachers give rewards, praise, and recognition to students for their performance										
35. Student work is displayed throughout the school										
36. A school wide reward system in place for encouraging good behavior										

	Presence				Importance					
	Strongly Disagree	Disagree	Agree	Strongly Agree	1	2	3	4	5	6
37. Students are expected to meet academic goals										
38. High expectations for student behavior in the classroom and at school events are communicated to students										
39. The principal consults with staff before making decisions that affect them										
40. School leaders analyze information from many sources and use it to make decisions										
41. School administrators behavior towards the staff is supportive and encouraging										
42. School administrators model the use of technology										
43. The principal facilitates collaborative identification and development of school goals with the staff										
44. The staff share a common school philosophy										
45. The principal reviews and interprets test results with the faculty										
46. The principal actively promotes and arranges staff development opportunities										
47. The principal is an instructional leader										
48. School administrators model the behaviors expected of staff										
49. The principal cultivates the leadership potential of every staff member										
50. The principal actively secures instructional resources										