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## Perceptions and Concerns of Novice Secondary Teachers in Louisiana: The Relationship of Novice Secondary Teacher Stress to Their Perception of Principal Leadership

Victoria Sanderlin Hand  
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Perceptions and Concerns of Novice Secondary Teachers in Louisiana:  
The Relationship of Novice Secondary Teacher Stress to Their  
Perception of Principal Leadership

A Dissertation

Submitted to the Graduate Faculty of the  
University of New Orleans  
in partial fulfillment of the  
requirements for the degree of

Doctor of Philosophy  
in  
Educational Administration

by

Victoria Sanderlin Hand

B.S. McNeese State University, 1977  
M.Ed. McNeese State University, 1986

December 2009

This dissertation is dedicated to the memory of my parents and my grandparents. They were brilliant inspirations as my first teachers. I am grateful they nurtured a passion for learning, an appreciation for independent thought, an enthusiasm for creative endeavors, and a delight in academic pursuits.

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The completion of any challenging task represents the loving contributions of many dear people. It is, like a tapestry, woven with many threads of subtle hues that, in the end, represent an intimate portrait of one's most cherished personal relationships. Writing this dissertation was the ultimate academic challenge for one trained as a teacher of science and mathematics. As I searched for a formula to this business of writing, I learned, I think, to actually articulate a few coherent thoughts. Thus, I would like to thank those that contributed to my very steep learning curve.

*"I delight greatly in the Lord; my soul rejoices in my God." Isaiah 61:10a*

It is my desire to keep God first and honor Him in all things...dissertations included. It was a struggle to keep this academic process in its proper place on my list of priorities. Often, I would allow it to jump ahead of time with God and with family. I thank God for the grace to complete this part of my tapestry, for He supplied the materials and resources. The thread of inspiration and the framework of support were available by God's heavenly design.

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crisper had devolved into a refrigerator slimer, and that supper was often from the dollar menu at a local fast food drive-through. Thus, the images captured in my tapestry were most assuredly enriched by the unselfish love of my family.

*“As iron sharpens iron, so one man sharpens another.” Proverbs 27:17*

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I eagerly anticipate what lies ahead.

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## ABSTRACT

The demand for highly qualified teachers is well documented, yet numerous stressors influence educators to leave their positions. The guiding question for this study was: Is there a relationship between perceived principal leadership behavior and the stress experienced by the novice secondary teacher?

The target population was novice teachers in Louisiana. The purposive sample was delimited to novice secondary teachers having six semesters of teaching experience or less in grades 6 through 12. The ten largest parishes in Louisiana were selected to sample. Four of the ten parishes granted permission to survey novice secondary teachers.

The *Leader Behavior Description Questionnaire, Form XII* (Stogdill, 1963) was used to determine the perception of principal leadership in two dimensions: consideration behavior and initiation of structure behavior. The *Teacher Stress Inventory* (Fimian, 1988) was used to collect demographic data on the participants and to determine a composite stress score from five sources of stress and five manifestations of stress. The statistical analyses included stepwise multiple regression and one-way ANOVA. Data were analyzed with the *Statistical Package for the Social Science Version 16.0* (SPSS).

Time management, along with discipline and motivation, were the top two sources of stress for novice teachers. Fatigue manifestation and emotional manifestation were the most conspicuous manifestations of stress. These results reflect relevant issues facing the contemporary teacher. Professional investment, the diminished autonomy teachers experience when the locus of control is external to the classroom, was the single most reliable source of stress to predict both initiating structure and consideration leadership behavior. Emotional manifestation was the single most reliable manifestation of stress to predict initiating structure

and consideration leadership behavior. No significant relationship was found between the demographic and organizational variables and stress in the novice secondary teacher.

Principal leadership is a potential predictor of teacher retention. Thus, the findings of this study have implications for three specific areas: programs of support for new teachers, preparation and training of principal leadership, and policies that are critical for the successful principal.

### **Keywords**

Teacher Stress, Sources of Teacher Stress, Teacher Satisfaction, Teacher Turnover, Teacher Retention, Manifestations of Teacher Stress, Secondary Teacher, Principal Leadership Behavior, Buffering, Teacher Autonomy, *Leadership Behavior Description Questionnaire* (LBDQ), Stogdill, Initiating Structure Leadership Behavior, Consideration Leadership Behavior, *Teacher Stress Inventory* (TSI), Fimian, Herzberg, Secondary Educational Leadership, Secondary Educational Administration, Ohio State University Leadership Studies, Leader Behavior

## **CHAPTER ONE**

### **Introduction**

Improving educational performance is the cornerstone of modern educational reform initiatives. It is generally agreed that teachers matter and good teachers are critical to improving student achievement (National Science Board, 2008; U.S. Department of Education, 2005). Exposing a student to high quality teaching through the early grades can significantly diminish the effects of a disadvantaged background (Rivkin, Hanushek, & Kain; 2002) and can considerably reduce the achievement gap (Gordon, Kain, & Staiger; 2006). While striving to balance the demands of accountability, districts are realizing astonishing rates of teacher turnover. Approximately 50% of novice teachers leave the profession within the first five years, and more than half cite dissatisfaction with teaching as their reason (Wynn, 2008).

Principal leadership matters and is a requirement for effective schools (Waters, Marzano, & McNulty, 2003). Principal leadership is a key component in the implementation of accountability initiatives and has been linked to improving student achievement (Metropolitan Life, 2003). The organizational culture of a school is molded by the principal who sets the organizational direction. Additionally, teachers' perceptions of the principal's leadership are often related to their perceptions of the organizational culture. Thus, principal leadership can develop clarity of the school's mission that, in turn, fosters organizational cohesiveness and commitment (Kahlenberg, 2000). The nature of principal leadership can be a powerful predictor of teacher satisfaction and commitment (Darling-Hammond & Post, 2000).



## Context of the Problem

### *Legislative Background*

Much of the public's interest in today's reform measures can be traced to the *Elementary and Secondary Education Act* (ESEA). This federal statute was signed into law in 1965 and committed to fund improvements in education through 1970. An integral component of the legislation prescribed a systematic evaluation of student achievement to qualify school districts for continued ESEA funding. Passage of the ESEA marked the first federal implementation of a formal accountability system based on student assessments (Popham, 2001). Educational reforms accelerated again in 1983 with President Reagan's appointment of the National Commission on Excellence in Education and the publication of *A Nation at Risk: The Imperative for Educational Reform* (National Commission on Excellence in Education, 1983). Policy makers focused on four widely discussed perceptions: (a) a lack of academic rigor, (b) low expectations for student achievement, (c) increasing the standards for teacher certification, and (d) recruiting quality teachers (U.S. Department of Education, 2004). *The Goals 2000: Educate America Act* followed and was signed into law in 1994 by President Clinton. Goals 2000 articulated eight national educational objectives that are considered to be foundational to modern, standard-based reforms (Dee, 2002). Embedded in Goals 2000 is a directive for local school districts to develop recruitment and retention strategies that facilitate the expansion of highly talented educators (*Goals 2000: Educate America Act*, 1994).

The *No Child Left Behind* (NCLB) Act of 2001, a reauthorization of the ESEA, was signed into law by President Bush in January 2002. The NCLB Act established specific accountability guidelines and empowered the state educational agencies to implement rigorous systems to meet national educational standards (Kucerik, 2002). NCLB attempted to address fundamental educational concerns including a mandate for districts to provide all children the

opportunity to meet and exceed high academic standards under the vigilant care of a highly qualified professional. In 2002, the United States Secretary of Education, Rod Paige, proposed a comprehensive model for teacher certification that emphasized content mastery of the curriculum (U.S. Department of Education, 2002). The culture of accountability established by NCLB aimed to place a highly qualified teacher in every American classroom by the end of the 2005-2006. Three key requirements were integral to the highly qualified designation. They included: (a) a bachelor's degree in a specific content area, (b) certification granted by the state, and (c) demonstrated competency in the content to be taught (National Council on Teacher Quality, 2004). Teachers in a secondary school setting must specialize in a particular subject as outlined in the NCLB definition of highly qualified (National Council on Teacher Quality).

As a result of NCLB, not only are highly qualified teachers required, but all children must be provided the opportunity to attend an academically excellent school (Simpson, LaCava, & Graner, 2004). Formal systems for holding schools accountable are mandated by NCLB and are operational in all 50 states (U.S. Department of Education, 2005). The percentage of highly qualified teachers is a key consideration in the calculation of a score for school performance. Thus, the accountability measures of NCLB have created two issues of concern to policy makers: recruitment and retention of highly qualified teachers.

### ***Teacher Recruitment***

Many of the discussions regarding recruitment are focused on schools that are hard-to-staff schools, which are sometimes referred to as at-risk schools. The National Partnership for Teaching in At-Risk Schools (2005) defined the at-risk school as one that teaches large numbers of educationally disadvantaged students. These students are likely to perform poorly academically and are at risk of dropping out. Generally, these schools also serve a large proportion of minority students and impoverished students. Additionally, the at-risk school has

relatively few highly-qualified teachers in its employment. The National Center for Education Statistics (1997, 2004) found that our most disadvantaged, diverse schools had almost twice as many new teachers as the equivalent school with a more affluent, homogeneous student population. Additionally, the at-risk schools were more likely to hire teachers that are not highly qualified. In Louisiana's high poverty schools, 75% of the classes are taught by a highly-qualified teacher, compared to 92% of the classes in a low poverty school (Louisiana Department of Education, 2008b).

Current national estimates predict that two to three million new teachers will be needed over the next ten years (Hirsch, 2006). There are a number of justifications for this estimate. In 2000, 30% of American public school teachers were fifty years old or older (Young, 2003). The graying of America's educators prompts the estimate that 50% will retire by the year 2010 (Ingersoll, 2003). Similarly, in Louisiana more than 48,000 experienced teachers, approximately 75% of the classroom teachers, are currently near retirement age (Teacher Retirement System of Louisiana, 2007).

Some stakeholders view retirement as a minor consideration when compared to the predicted vacancies that will occur as a result of assessment-based accountability measures and tightened teacher certification requirements specified by NCLB (Ingersoll, 2001). The National Center for Educational Statistics (2004) confirmed the average ratio of students to teacher is declining. In 1965, the ratio was 25 students per teacher. In 1985, the ratio dropped to 18 students for every teacher. The reform measures in NCLB encouraged a further reduction in the ratio to its current level of 15:1 in 2006 and a projected ratio of 14:1 in the year 2018 (National Center for Education Statistics, 2009). Thus, districts would realize a need to hire more teachers.

A parallel issue to the issue of teacher recruitment is the number of students enrolling in public schools. In 1990, public school enrollment in kindergarten through grade twelve, stood at 43.5 million students and in 2007, the enrollment jumped to 49.3 million students. The projected student enrollment for 2018 is 53.9 million students enrolled in public schools (National Center for Education Statistics, 2009). Thus, the demand for teachers continues to escalate.

Districts find recruitment of novice teachers must compete with a declining interest in education as a profession. In 1968, 26% of college freshmen reported an interest in teaching as compared to only 6% in 1982 (Astin, Oseguera, Sax, & Korn, 2002). The American College Testing (ACT) organization confirms the downward trend. In 2009, only 3% of the college-bound students indicated an interest in education as profession (ACT, 2009).

Uncertified teachers are often permitted to teach in an at-risk school with emergency certification and a formal agreement to pursue an alternative path to certification. Alternative certification has emerged as one strategy to battle the shortage of highly qualified teachers. Title II of NCLB provides for entry into teaching through alternative certification programs. In 2003, the federal government committed \$41.65 million to remedy the anticipated shortage of teachers (Blair, 2003; Feistritzer & Chester, 2003). Typically, the alternative program is designed with a partnering university and permits the uncertified teacher to work in a school while simultaneously enrolled in a program of study designed to provide state certification (National Center for Education Statistics, 2004). Additionally, districts often attach the college coursework as a condition for employment, and NCLB guidelines require districts to dismiss teachers that do not complete the prescribed program of study. This on-the-job training fast tracks potential candidates by offering an abbreviated course of study to quickly facilitate state certification.

Currently, alternative certification programs are in place in all 50 states and the District of Columbia (National Center for Education Information, 2008).

### ***Teacher Retention***

The capacity to retain teachers has become a contemporary issue of concern to all educational stakeholders. The high demand for teachers is precipitated by the mass exodus of educators at higher rates than employees from other occupations (Fox & Certo, 1999).

In Louisiana, some hard-to-staff secondary schools have average turnover rates of 35% to 72% (Louisiana Department of Education, 2008b). Consequently, a number of Louisiana parishes, like Caddo, East Baton Rouge, and Avoyelles, have looked outside the United States to fill openings in hard-to-staff schools (Goodnight, 2008; Northington, 2008).

It is predicted that nationally, half of all new teachers will leave the classroom within seven years, and two-thirds of those will depart in the first four years (National Center for Education Statistics, 2004). Additionally, only 60% of college graduates that are trained as teachers will actually enter the profession, and 30% of that group along with 60% of the alternatively certified teachers will leave the profession by the third year (Darling-Hammond & Post, 2000). Teacher attrition statistics suggest that younger teachers leave the profession at higher rates than older teachers, and significant numbers of novice teachers exit teaching (National Center for Education Statistics). As an example, Hanushek's (2003) study of teachers in Texas found that teachers with less than two years of experience were twice as likely to leave teaching as teachers with eleven to thirty years of experience.

Historically, the dynamics of school effectiveness have linked supportive principal behavior to teacher satisfaction and retention. More than four decades ago, Bowers and Seashore (1966) found a strong direct relationship between leadership and employee satisfaction. Similarly, encouraging, supportive principal leadership matters to the modern teacher (Hirsch &

Emerick, 2007). Teachers feel empowered when principal leadership ensures an organizational climate that is firmly encouraging. Hirsch and Emerick support the notion that principal support strongly correlates with teacher retention. For example, Hirsch (2005) found that 25% of teachers in South Carolina identified principal leadership as the most critical factor influencing their decision to stay or leave the profession. “The recruitment and retention of well-prepared teachers and the support of high-quality teaching are the major functions of a principal...” (Darling-Hammond & Post, 2000, p. 134).

Teacher retention is inherently a human resource issue. The principal is fundamentally responsible for attracting and retaining the most qualified teachers (Sarrio, 2008). Scholars do agree that leadership can have significant influence on general school performance variables. As an example, Lambert (1998) identified teacher empowerment as the primary task of principal leadership. Griffeth, Hom, and Gaertner (2000) found that job satisfaction could serve as a reliable attitudinal predictor of employee turnover. To that end, many districts have implemented school reform initiatives that specifically train principals in methods of retaining new teachers (Neild, Useem, & Farley, 2005).

Modern accountability initiatives are part of a broad public interest in principal leadership, and the emphasis on ambitious student achievement creates a strong interest in how principal leadership can influence school climate and outcomes (Hirsch & Emerick, 2007). Principal leadership stands at the crossroads of school performance, student achievement, faculty retention, and stability. The accountability measures mandated by NCLB prompt all stakeholders to examine the contexts and practices of principal leadership (Mosenthal, Lipson, Torncello, Russ, & Mekkelsen, 2004).

## ***Principal Leadership***

Precise definitions of school leadership have changed over time. The traditional view of principal leadership as monitoring teacher compliance is yielding to the modern profile of leadership that facilitates a highly productive, cohesive network at the local school site (Wynn, 2008). The focus of contemporary principal leadership has expanded from merely managing the physical school plant. The modern principal must not only oversee the building and grounds, but also build a stable, coherent faculty and professional community.

“Leadership is one of the most observed and least understood phenomena on earth” (Burns, 1978, p. 2). Rost (1993) observes that the scholarly literature has failed to define leadership. The term *leadership* implies a wide variety of ambiguous meanings. Thus, not only is the definition of leadership evolving, but a description of leadership behavior has also proven elusive. Leadership behavior is commonly categorized into two broad descriptive categories (Bass, 1990; Blase, 1987; Sosik & Godshalk, 2000; Stogdill, 1974; Yukl, 1990). The first category is initiating structure behavior. This leadership behavior describes task-relevant behaviors that include procedurally-driven, organizational responsibilities like personnel evaluation and planning. The second dimension is consideration behavior, which addresses the recognition of subordinates and serves to augment their job satisfaction.

House (1996) suggested that consideration leadership behavior was explicitly related to employee satisfaction. Griffeth, Hom, and Gaertner (2000) established in a meta-analysis of employee turnover that overall job satisfaction was the most reliable attitudinal predictor of turnover. Additionally, the principal could be a pivotal influence upon the satisfaction of the novice teacher.

Research suggests that principal leadership behavior could be a powerful predictor of teacher commitment and satisfaction (Darling-Hammond & Post, 2000). For example a 2008 study found that public high school teachers who perceived their school principals to be supportive were more likely to continue teaching than those who did not share that view (National Science Board, 2008). Similarly, earlier work by the Center for Teaching Quality established strong connections between the teachers' perceptions of their school leadership and teacher retention (Hirsch & Emerick, 2006a, 2006b, 2007). Teachers included an uncaring attitude and a failure to listen as negative principal leadership behavior that contributed to a lack of trust (Kouzes & Posner, 2007). Additionally, novice teachers commonly identified substandard facilities, inadequate resources, difficult teaching assignments, professional isolation, and lack of administrative support as stressors and sources of dissatisfaction (Hirsch, 2005; Hirsch & Emerick, 2006a, 2006b).

### ***Teacher Stress***

Early definitions of stress focused singularly on either the sources of stress or the manifestations of stress. Source-based models of stress were aligned with the traditional sciences and the notion of load tolerance (Greenbert & Baron, 2000). The cumulative nature of stress was foundational to this perspective and was evident in contemporary definitions of stress. House (1974) characterized stress as a response to environmental demands that were perceived to exceed one's capacity to meet them. Kyriacou and Sutcliffe (1979) defined teacher stress as a negative response to some aspect(s) of the teacher's job.

Manifestations of stress have also been strongly linked to a propensity to leave an organization (Parasuraman & Alutto, 1984). Selye's (1955) seminal work on stress as a physiological response linked occupational stress to a wide variety of manifestations. Physical responses included elevated heart rate, high blood pressure, or gastrointestinal disorders.



Emotional and behavioral responses included sleep disturbances, headaches, absenteeism and turnover (Riggio, 1999).

Contemporary views of stress combined the source-based model with the response-based model that yielded a holistic definition of stress. This framework was more dynamic, fluid and subjective. For example, Fimian (1988) articulated a modern view of teacher stress. Fimian operationally defined the construct of teacher stress as an integrated model along ten subscales that identified five sources of stress and five manifestations of stress. The five sources of stress for teachers included: (a) *professional investment*, which described the diminished autonomy that a teacher experienced when the locus of control was outside of the classroom, (b) *time management*, which addressed the effort to balance time demands and excessive workloads, (c) *discipline and motivation*, which described management of student behavior, (d) *work-related stressors*, which described environment-specific events like volumes of paperwork, class size, number of preparations (i.e. subjects) taught, and (e) *professional distress*, which described how the teacher perceived himself as a professional. The five manifestations of teacher stress included: (a) *behavioral manifestations*, which described the teacher's efforts to cope with their occupational stress, (b) *emotional manifestations*, which described the various emotional responses to teaching stress, (c) *gastronomical manifestations*, which addressed a number of stomach disorders that are common in teachers under stress, (d) *cardiovascular manifestations*, which presented a range of ailments, like elevated blood pressure, that are commonly related to stress, and (e) *fatigue manifestations*, which included a number of stress-related fatigue issues.

Van Der Linde (2000) suggested that stress for teachers was subjectively different from the stress experienced in other occupations. Teaching represented a complex nexus of internal and external factors. External accountability reforms, like NCLB, overrode a teacher's need for

autonomy and eroded his motivation and commitment (Szczesiul, 2009). Internal accountability issues that included shared organizational norms and policies were often formulated and imposed by principal leadership (Van Dick & Wagner, 2001). Therefore, when compared to other occupations, teaching had some of the highest levels of stress (Kyriacou, 2001).

An opinion poll for the Metropolitan Life Insurance Company (2003) regarding job satisfaction confirmed that teaching was stressful. Also stated in the opinion poll report was the finding that dissatisfaction was significantly related to perceptions of time pressures and administrative support (Metropolitan Life, 2003, 2005, 2006). In Hawaii, for example, dissatisfaction with professional support for new teachers was the number one reason cited by teachers leaving the profession (Nakaso, 2008). For the novice teacher, such stress was amplified by the transition into a new position (Reichardt, 2001).

Stress was also a consideration in teacher turnover (Brown & Uehara, 1999). New teachers were placed in some of the most challenging positions. For example, Hanushek, Kain, and Rivkin (2004) established that teacher turnover was strongly related to student characteristics. Teachers employed in schools that served large percentages of academically disadvantaged minority students experienced substantial turnover. Nield, Useem and Farley (2005) found that over 25% of teachers at the lowest-income schools had less than two years of teaching experience and reported significant levels of dissatisfaction.

Social support and healthy professional relationships were commonly perceived to promote well-being in the workplace. Many work satisfaction surveys connected a lack of support from the principal leadership to a negative affect (Byrne, 1992). Hirsch (2005) identified positive and supportive principal leadership as the most significant predictor of turnover in South

Carolina schools. Thus, when principal leadership existed in a partnership with the teachers, the organizational climate and the teachers' satisfaction improved.

### **Statement of the Problem**

Continued emphasis on the highly qualified teacher frames the context for modern school leadership. The rigorous accountability measures embedded in NCLB specify not only the expected outcomes for the administrator and the teacher but also the nature of the interactions between principal and teacher. Accountability initiatives have altered the context within which modern schools operate. Mandated policy changes have redefined the degree of external involvement as teachers seek to fulfill instructional obligations. A parallel shift in principal leadership reflects a similar change. Principals are held accountable for measurable student outcomes. Thus, principal leadership is a key component in the implementation of accountability initiatives that mandate highly qualified teachers in every classroom.

The demand for highly qualified teachers is well documented and precipitated by the mass exodus of educators. Additionally, a sizable number of teachers are approaching retirement age. Therefore, teachers with reliable credentials and the most experience leave the profession in greater numbers than their less qualified counterparts. Alternative certification and emergency certification represent the primary solutions to the shortage of highly qualified teachers.

Numerous stressors influence educators to leave their positions: inadequate support from school administrators, difficult teaching assignments, and an inability to meet the daily rigors of teaching (Hirsch, 2006; Hirsch & Emerick, 2006a, 2006b; Southern Regional Education Board, 2001). However, it is possible that principal leadership behavior can ease teacher stress. As an example, the National Science Board (2008) found that teachers who perceived their principals to be supportive were more likely to continue teaching than those who did not share that view.

Additionally, some believe that the teacher's perspective has not received adequate attention and that the current body of research is dominated by teachers in the elementary setting (Blase, 1987). When these issues are considered together, the relationship between the stress experienced by the novice secondary school teachers and their perceptions of principal leadership behavior becomes relevant to teacher recruitment and retention.

### **Research Questions**

The renewed emphasis on highly qualified teachers, embedded within NCLB, underscores the importance of principal leadership to the recruitment and retention of teachers. Thus, the guiding question for this study empirically examines the relationship between perceived principal leadership behavior and the stress experienced by the novice secondary teacher. Two broad secondary questions arise from a consideration of the demographic and the organizational variables associated with the novice secondary teachers. Demographic variables are those over which the participant has no control and may include age, sex, and race (Gay & Airasian, 2003). Organizational variables are those aspects of the teaching assignment that are externally controlled and assigned to the novice teacher as part of the principal's administrative duties. As an example, student load, number of subjects taught, and extracurricular duty assignments are typically assigned to the teacher by the principal. Thus, the general research questions proposed in this study are as follows:

1. Is there a relationship between perceived secondary principal leadership behavior and the stress experienced by novice secondary school teachers?
2. Is there a relationship between demographic characteristics associated with novice secondary teachers and the stress experienced by novice secondary teachers?

3. Is there a relationship between organizational variables and the stress of novice secondary teachers?

### **Research Hypotheses**

The three broad research questions suggested specific hypotheses. Research question one was considered in four hypotheses:

Hypothesis 1: Sources of stress for novice secondary teachers will significantly predict the perception of initiating structure leadership behavior of their principal.

Hypothesis 2: Sources of stress for novice secondary teachers will significantly predict the perception of consideration leadership behavior of their principal.

Hypothesis 3: Manifestations of stress for novice secondary teachers will significantly predict the perception of initiating structure leadership behavior of their principal.

Hypothesis 4: Manifestations of stress for novice secondary teachers will significantly predict the perception of consideration leadership behavior of their principal.

Research question two, regarding the influence of demographic variables, and research question three, regarding the influence of organizational variables, suggested associated hypotheses:

Hypothesis 5: Total stress scores for novice secondary teachers will differ across demographic variables.

Hypothesis 6: Total stress scores for novice secondary teachers will differ across organizational variables.

## **Theoretical Framework**

### ***Theory Informing the Research***

Theory is the attempt to explain phenomena (Rudestam & Newton, 2001), and a definitive description can be elusive (Sutton & Staw, 1995). Two traditional leadership theories guided this research. Behavioral theory, profiled in the leadership behavior studies at Ohio State University (Stogdill & Coons, 1957), was the theoretical lens utilized to examine principal leadership behavior. The second theoretical prong was a traditional theory of satisfaction and motivation: Herzberg's Motivation-Hygiene Theory (Herzberg, 1965, 1966; Herzberg, Mausner, & Snyderman, 1959). Rost (1993) asserted that the dynamic interaction between leaders and followers has been largely ignored. Thus, consideration of both theories in tandem represented an attempt to build a framework for understanding the relationship between principal leadership and stress in the novice secondary teacher.

The Ohio State University Model of Leadership Behavior categorized leadership behavior into two traditional categories: initiating structure behavior and consideration behavior. Initiating structure behavior gave task-oriented and process-driven attention to organizational details. This behavior was typified in the development of duty assignments and prioritization of subordinate tasks. Consideration behavior focused relationship-driven attention upon the development of professional collegiality. Consideration behavior was exemplified in employee recognition programs. Green (2009) suggested that when taken together, the two distinct dimensions yielded a complete description of the modern secondary school principal.

Herzberg's theory pivoted on the basic premise that organizational leadership was inseparably woven into the satisfaction of the employee and the high value of that employee to the organization (Herzberg, 1966; Shafritz, Ott, & Jang, 2005). Herzberg proposed a humanistic or human resource theory because people and relationships were at the center of attention

(Shafritz, Ott & Jang). Similarly, the accountability measures mandated by NCLB established a focus on the twin human resource issues of recruitment and retention of highly qualified teachers with retention, in particular, hinging upon teacher satisfaction, it is noteworthy that a significant number of novice teachers leaving the profession have cited a deficit in administrative support (Hanushek, 2003; Ingersoll, 2001; Johnson & Birkeland, 2003; U.S. Department of Education International Affairs Office, 2004).

Modern principal leadership was molded by contextual factors that establish boundaries within which principals and teachers interact (Hirsch, 2005). The rigorous accountability measures embedded in NCLB specified not only the expected outcomes for the administrator and the teacher but also the nature of the interactions between principal and teacher. Parallel to the high expectations embedded in federal initiatives were the numerous sources of stress that influence educators to leave their positions. Many of the stressors were analogous to the motivation-hygiene factors. Thus, vintage theories like Herzberg's Motivation-Hygiene Theory and the Ohio State University Model were appropriate lenses through which to view the problem.

### ***Ohio State University Model of Leadership Behavior***

The Ohio State University Model of Leadership Behavior (Bass, 1990; Marion, 2002; Stogdill & Coons, 1957) evolved from the work of John Hemphill and Alvin Coons (Stogdill & Coons, 1957). The *Leader Behavior Description Questionnaire, Form XII* (LBDQ), emerged from their work and was later refined by Halpin and Winer (1957). The LBDQ, Form XII identified two dimensions of leadership, initiating structure behavior and consideration behavior. These persist as common categories in modern taxonomies of leadership behavior (Sosik & Godshalk, 2000).

Initiating structure leadership behavior was described as job-centered, organized and defined around organizational roles, and focused on the task to be accomplished (Stogdill, 1970). In this dimension of leadership, the leader was attentive to organizational structures that facilitated the accomplishment of tasks. Competencies relevant to task behavior included the use of standard operating procedures, planning, organizing, and evaluating the work of subordinates. Initiating structure behavior emphasized the distinction between the leader and the subordinate (Hoy & Miskel, 2001). Thus, the initiating structure behavior was driven by management and authority.

Consideration leadership behavior was concerned with developing relationships, mutual trust, and respect (Stogdill, 1970). Consideration behavior was commonly described as friendliness, supportiveness, and a collegiality that fosters warmth and trust. Hoy and Woolfolk (1993) have extensively researched teacher efficacy and the link to principal leadership. Schools that had healthy organizational climates also placed strong emphasis on academics and confident teachers (Hoy & Woolfolk). Additionally, Hoy and Woolfolk identified recognition of teachers, a consideration behavior, to be an indicator of healthy schools.

The construct of satisfaction is often used interchangeably with morale in the literature. As an example, Coughlan (1970) empirically connects morale to the individual's perception of the sources of satisfaction in the work environment. Morale is a collective sense of enthusiasm that is demonstrated in a willingness to perform tasks and taking pride in the school (Hoy & Woolfolk, 1993). For the teacher, low morale and dissatisfaction are tacitly embedded in sources of teacher stress (Kyriacou, 2001) and overtly linked to teacher retention issues (Hirsch & Emerick, 2006a, 2006b). Thus, consideration leadership behavior was positively linked to satisfaction and morale (Bass, 1990).



### ***Herzberg's Motivation-Hygiene Theory***

The Motivation-Hygiene Theory proposed by Frederick Herzberg (Herzberg, 1965, 1966; Herzberg, Mausner, & Snyderman, 1959) explored job satisfaction (see Appendix A). Herzberg proposed satisfaction and dissatisfaction as two distinct outcomes, rather than opposing ends of a continuum. The motivation factors described the relationship to the work itself and were capable of producing long-term satisfaction. In comparison, the hygiene factors were affiliated with the work environment and did not directly yield satisfaction. However, the absence of a hygiene factor could produce dissatisfaction (Marion, 2002).

The motivation factors were “strong determiners of job satisfaction” and dealt mostly with the job content and the work itself (Bolman & Deal, 2003). Five factors that strongly determined satisfaction were job achievement, recognition, the work itself, responsibility, and advancement (Herzberg; Marion, 2002). The motivation factors had a definitive impact upon job satisfaction (House, 1996). Blase (1986) and Blase and Kirby (1992) affirmed the notion that praising teachers enhances motivation. Additionally, Rosenholtz (1991) connected recognition to higher teacher retention rates. This researcher found that the intrinsic reward of feeling successful contributed to teacher satisfaction. Thus, motivation factors defined the parameters of satisfaction through the contribution of the employee to the organization.

Hygiene factors addressed the work context (Bolman & Deal, 2003) and included pay, benefits, and working conditions. The hygiene factors were described as exogenous environmental aspects over which employees have little control. As an example, Loeb, Darling-Hammond, and Luczak (2005) found that insufficient numbers of student textbooks were reliable predictors of high teacher turnover rates. The hygiene factors did not, in themselves, yield higher job satisfaction, but rather were intended to prevent dissatisfaction (Marion, 2002). If these

factors were minimal or absent, then dissatisfaction with the job was highly likely. Consequently, their presence had little influence on long-term satisfaction.

Hackman and Oldham (1980) expanded Herzberg's model into the field of organizational psychology. Three crucial considerations were specified to influence job satisfaction and motivation of employees. First, the individual needed to view his work as meaningful and as part of a whole. Second, individuals needed to feel personally accountable for their work. Third, individuals had to receive constructive feedback about their contribution. The three considerations posited by Hackman and Oldham affirmed the notion that job satisfaction was an important consideration for novice teachers because it drove turnover and attrition (Ingersoll, 2001; Liu, 2005).

Sergiovanni (2000) applied Herzberg's theoretical model to the educational setting assigning achievement, recognition, interesting and challenging work, and a sense of responsibility for the work as motivators. The hygiene factors identified by Sergiovanni included interpersonal relationships on the job, non-stressful and fair supervision, reasonable policies, and a constructive administrative climate.

Contemporary analyses of teacher turnover revealed that teachers were leaving the profession and cited job dissatisfaction as the primary reason (Alliance for Excellent Education, 2005). Common sources of dissatisfaction paralleled common sources of stress for the teacher, including a lack of planning time, heavy workloads, inadequate instructional resources, and problematic student behavior (Alliance for Excellent Education; Blase, 1986). Additionally, novice teachers reported high levels of stress associated with deficient administrative support, classroom management, assessment-based accountability responsibilities, and unsatisfactory parent relationships (Metropolitan Life Survey of the American Teacher, 2005).

The independent variable in this study was stress in the novice secondary teacher. The dependent variable was the novice secondary teacher's perception of principal leadership behavior. It is often helpful to represent the independent and dependent variables with a visual model (Creswell, 2003). The graphic representation (see Figure 1) illustrates the guiding question for this study. Does stress in the novice secondary teacher inform their perception of principal leadership behavior? The framework attempted to build a conceptual basis for understanding the relationship between stress in the novice secondary teacher and their perception of principal leadership behavior. Sergiovanni (1979) described such a framework as a metaphor through which data will be filtered as a link to the theoretical perspective. Thus, the conceptual framework served as the visual model around which the research questions were formulated (see Figure 1)

The principal, as the chief operating officer of the school, influences each of Fimian's (1988) five sources of stress that touches the novice secondary teacher; in some instances principal leadership behavior may be a source of stress. The teacher develops the manifestations of stress that inform her perceptions of principal leadership behaviors as either consideration behavior or initiating structure behavior. Those perceptions potentially become a contextual reality for the teacher, impacting possibilities for her retention.

**Figure 1. Conceptual Framework**



### **Purpose of the Study**

The primary purpose of this quantitative study is to determine if a significant relationship exists between the novice secondary teachers' perceptions of leadership behaviors of secondary school principals and novice secondary school teacher stress. The Leader Behavior Description Questionnaire developed by Ohio State University (Stogdill, 1963), was used to determine the perception of principal leadership in two dimensions: consideration behavior and initiation of structure behavior. The Teacher Stress Inventory (Fimian, 1988) was used to determine a composite stress score from five sources of stress and five manifestations of stress that, together, define the construct of teacher stress (Fimian, 1988; Fimian & Fasteneau, 1990). Additionally,

the potential influence of demographic variables (age, sex, marital status, number of subjects taught, certification path, and education level) upon the composite stress score was statistically analyzed.

### **Significance of the Study**

Effective principal leadership can attract and retain the most capable teachers. Research suggests that important differences in teacher turnover rates and retention can occur between schools with nearly identical organizational profiles. According to Mullican and Ainsworth (1979), the differences may be attributed to principal leadership behavior. In an analysis of data collected from the National Schools and Staffing Survey, Ingersoll (2001) found that increased support from school administration could contribute to lower rates of teacher turnover. Not surprisingly, Leithwood, Louis, Anderson, and Wahlstrom (2004) found considerable support for the notion that principal leadership behavior can augment teacher satisfaction by utilizing encouragement and support. Additionally, at the school level, teachers that participate in a supportive organizational culture have the most direct influence on student achievement. Thus, a primary implication for this research is improved leadership practices.

A key consideration in school performance scores is student achievement. It suffers when teachers are tardy, absent, apathetic, alienated, leave their jobs, and perform classroom responsibilities poorly. Hence, it is imperative that teachers stay long enough to develop sophisticated levels of expertise that our students require to successfully meet the demands of a changing society. Research documents that stressed teachers who remain in the classroom are less effective in critical areas such as lesson planning, instruction, and managing student behavior (Fimian, 1988, 1986b; Fimian & Fastenau, 1990). Without school administrators who

understand their power to influence those under their charge, school improvement is a hollow term.

The challenge of retaining highly qualified teachers underscores the evolving context for school leadership and highlights the urgent need to build and maintain instructional capacity. Additionally, understanding the dissatisfaction that fuels teacher turnover could improve organizational effectiveness and policy making. Elevated levels of teacher stress have implications for the learning environment and interfere with educational outcomes (Wiley, 2000). Over six million high school students are at high risk of dropping out (Portin & Shen, 2002). Additionally, students in high poverty, at-risk schools are twice as likely as other students to have novice teachers (Alliance for Excellent Education, 2005; Nield, Useem, & Farley, 2005). Clearly, a stable staff can be especially meaningful to low performing schools and high poverty schools. A steady stream of new faculty members affects continuity and stability because of the constant need to rebuild and establish new working relationships. Faculty stability becomes especially important to principal leadership in the secondary school where truancy and dropout rates are unique issues. Teacher attrition is also costly to districts. One national estimate of the cost to replace public school teachers that have left the profession is \$2.2 billion dollars per year (Alliance for Excellent Education, 2005). In the state of Louisiana, there were more than 51,000 teachers in 2005. Almost 8,000 left the profession or transferred to more desirable schools within the district. The costs of recruiting and advertising, hiring, and training replacement teachers are substantial (National Commission on Teaching and America's Future, 2003). Estimates of the cost to replace teachers in the state of Louisiana were approximately \$76,842,844 to the state (Alliance for Excellence in Education).

### **Delimitations of the Study**

Delimitations describe parameters in the design of the proposed research that are imposed by the researcher (Creswell, 2003). The research study was delimited to novice secondary teachers having six semesters of teaching experience or less in grades 6 through 12. The researcher delimited the emphasis of the influence to the secondary school level in direct response to a recurring theme in the research noting an existing gap in understanding effective secondary school principal leadership (Alliance for Excellent Education, 2005). Principal leadership at the elementary school level dominates the research (Chrispeels, 2002; Wheelan & Kesselring, 2005), but, secondary school leadership is the desired focus of this research.

### **Limitations**

Limitations describe aspects of the proposed study over which the researcher has no control (Gay & Airasian, 2003). Thus, the limitations may also identify potential weaknesses in the design. There were six limitations in this research design that may have influenced the outcomes. One limitation of this cross-sectional study was data collection at one single point in time. Data collected in this manner may not yield an adequate perspective (Gay & Airasian, 2003). Generalizations that may evolve from this single snapshot must be considered within the constraints of the time perspective (Leedy & Ormrod, 2005). Second, self-reported responses on a survey questionnaire could receive a low response rate (Gay & Airasian, 2003). Approximately 600 novice secondary teachers were invited to participate in the online survey questionnaire. Forty percent participated in the online questionnaire. Third, self-reported data can be distorted, especially when one is describing an attitude or an opinion (Leedy & Ormrod, 2005). If the respondent has not previously considered the issue addressed in the questionnaire, then it is possible that his or her responses reflected only the context of the moment rather than an

enduring contextual reality. The fourth limitation was the possibility that the respondents purposefully misrepresented themselves because they wanted to tell the researcher what they anticipated the researcher wanted to hear (Leedy & Ormrod). The fifth limitation related to the inability of the participant to collect any follow-up information from the survey questionnaire. This limitation addresses the participants' concern for anonymity. The Internet Protocol (IP) address is a numerical identification assigned to computers in a network. SurveyMonkey<sup>TM</sup> provided the researcher with the opportunity to deselect the participants' IP address. Thus, identifying email addresses were not recorded through the data collection. Framed within the culture of accountability, the sixth limitation was that the findings from secondary participants would not be generalized to their elementary counterparts.

### **Definition of Terms**

In order to maintain a consistent focus, the following definitions are offered for clarity:

- *Attrition* describes the reduction in staffing numbers.
- *Educational level* refers to the highest level of education that the novice secondary teacher has completed including any of the following choices:  
bachelor's degree, master's degree, master's degree plus 30 hours, or doctorate.
- *Herzberg's Motivation-Hygiene Theory* is a model of motivation that includes:
  - *Motivation factors* that describe "strong determiners of job satisfaction" that deal with the job content and include (a) achievement, (b) recognition, (c) the work itself, (d) responsibility, and (e) advancement.
  - *Hygiene factors* that address the work context and include (a) company policy and administration, (b) relationships with co-workers, (c) the physical environment, (d) reasonable policies, and (e) non-stressful and



fair supervision (Herzberg, 1965, 1966; Herzberg, Mausner, & Snyderman, 1959)

- *Job satisfaction* describes the positive orientation of an employee towards the assigned work role and generally regarded as a multi-faceted attitudinal construct (Vroom, 1964).
- *Novice secondary teacher* refers to an educator that has six consecutive semesters or less of teaching experience or less in grades 6 through 12. A novice secondary teacher will fall into one of the following categories:
  - *Highly qualified college graduate* refers to the graduate of an accredited secondary teacher preparation program that generally requires a content area major plus additional pedagogical training through a school of education (U.S. Department of Education, 2005).
  - *Alternative certification program graduate* describes the novice teacher that does not graduate from accredited teacher education program but holds a bachelor's degree. They are required to pursue an alternative program of certification and are granted employment as regular classroom teachers. Participation in an alternative certification program is customarily a condition of employment that may not exceed three years (U.S. Department of Education, 2002).
- *Ohio State University Model of Leadership* includes:
  - *Initiation of Structure Behavior* that describes leadership that is job-centered and focused on the task to be accomplished.

- *Consideration Behavior* that describes leadership that is concerned with relationships, well-being, and contributions of the followers (Stogdill, 1963).
- *Principal* refers to the chief administrator at the local secondary school site.
- *Principal leadership* describes the utilization of influence to “direct and coordinate the activities of a school toward the accomplishment of group objectives” (Jago, 1982).
- *Stress* describes “a perceived excess of environmental demands over an individual’s perceived capability to meet them and when failure to meet those demands has important perceived consequences” (McGrath, 1970; Shirom 1982).
- *Teacher* is one employed by a local education agency and is involved in the full-time instruction of children and youth (Fimian, 1982).
  - *Secondary teacher* is an educator employed to teach grades 6-12.
- *Teacher job satisfaction* is a multi-dimensional construct that can be a predictor of teacher retention and a determinant of teacher commitment (Shann, 1998).
- *Teacher stress* is a ten-factor construct that is comprised of five sources of stress and five manifestations of stress (Fimian, 1988; Fimian & Fastenau, 1990), including:
  - *Source of stress* refers to the entity, occurrence, or demand that the novice high school teacher faces. The five sources of stress include:
    - *Professional investment* which describes the diminished autonomy that a teacher experiences when the locus of control is outside of the classroom.

- *Time management* which addresses the effort to balance the required demands on the teacher's time.
  - *Discipline and motivation* which describe the teacher-student relationship in two dimensions, including: (a) student discipline and (b) student motivation.
  - *Work-related stressor* which describes environment-specific events like volume of paperwork, class size, number of preparations (i.e. subjects) that compete with personal priorities.
  - *Professional distress* which describes how the teacher perceives himself as a professional and includes advancement opportunities, status and respect, and recognition.
- *Manifestation of stress* describes a symptom of stress. The five symptoms of stress include:
- *Behavioral manifestations* which describe the teachers' efforts to cope with their occupational stress and absenteeism caused by illness.
  - *Emotional manifestations* which describe the various emotional responses to teaching stress and include anxiety, vulnerability, and insecurity.
  - *Gastronomical manifestations* which describe stomach disorders that are apparent in teachers exposed to stressors.

- *Cardiovascular manifestations* which describe a range of physiological symptoms including elevated blood pressure and shallow breathing.
- *Fatigue manifestations* which describe a number of stress-related issues including procrastination and physical exhaustion.
- *Turnover* is a reference to the number of new employees hired to replace those that have left the profession.
- *Workplace conditions* are references to administrative support and leadership, student behavior and school atmosphere, and teacher autonomy (Bogler, 2000).

### **Organization of the Study**

This study contains five chapters. Chapter One includes an introduction to the research interest driving this study and includes the context of the problem, a statement of the problem, and the significance of the study. The theoretical lens, research questions, and significance of the study are supported with a conceptual map. The delimitations, limitations, and operational definitions are also included in this first chapter.

Chapter Two contains a review of the literature. The introduction speaks to the importance of principal leadership to teacher recruitment and retention. The literature review addresses two broad topics: principal leadership and teacher stress. Principal leadership is subdivided into topics related to the study. The components include principal buffering, transformational leadership, initiating structure and consideration leadership behavior, principal leadership and teacher satisfaction, and principal leadership preparation. Teacher stress subtopics include a discussion of demographic influences on teacher stress, organizational influences on

teacher stress, and perceptions of administrative support. A summary of principal leadership and teacher stress concludes this chapter.

Chapter Three includes a description of the research design utilized for this study. Information regarding the participants and the sampling method, the instrumentation, and the collection of data are included. The chapter also contains a discussion of the statistical procedures employed to analyze the data. Finally, research procedures, limitations, delimitations, and a summary conclude this chapter.

Chapter Four presents the results of the statistical analyses and includes four sections. An overview of the analyses and the organization of the chapter are described in the introduction. The second subdivision includes the mean stress subscale scores and standard deviations for novice teachers. The remainder of section two is organized around the specific data and analyses for the hypotheses of this study. The third section includes a review of hypotheses and the associated results. Lastly, a summary concludes the chapter.

Chapter Five presents a discussion of the results and connects the findings to theory and research. The chapter is organized into seven sections. The introduction outlines the organization of the chapter. The second section includes an overview followed by the findings of the study related in the third section. Additionally, the current research study is framed in the theoretical context and aligns the results with contemporary research. The limitations of this study are presented in the fourth section. Implications for programs of support, principal preparation, and policy are included in the fifth section. The sixth section is devoted to a discussion of future study. Lastly, conclusions regarding stress in novice secondary teachers and perceptions of principal leadership behavior are shared.

## **CHAPTER TWO**

### **Introduction**

Teaching and principal leadership are complex endeavors. Accountability initiatives have altered the context within which modern schools operate, and a parallel shift in leadership reflects this change. Organizational leadership was frequently identified as a key component in the development of instructional capacity (e.g. Corcoran & Goertz, 1995). Additionally, effective principal leadership powerfully predicted teacher satisfaction and commitment (Darling-Hammond, 2003; Kahlenberg, 2000) and was linked to reduced teacher turnover (Boyer & Gillespie, 2003). Some states, like Pennsylvania, recognized the link between quality teachers and effective principal leadership (Samuels, 2008).

Drago-Severson (2004) identified four pillars of practice for principal leadership that included mentoring new teachers and on-going development of experienced teachers. When the legislative mandates associated with NCLB were considered in tandem with the elevated attrition rates for teachers, securing highly qualified teachers became problematic for many districts. In Louisiana, the Commissioner of Higher Education has publicly recognized the deficit of highly qualified teachers as a critical obstacle to the efforts to improve student achievement (Louisiana Board of Regents, 2005). The difficulty in retaining highly qualified teachers has underscored the evolving context for school leadership and the urgent need to build and maintain instructional capacity.

Understanding the dissatisfaction that fuels teacher turnover could improve organizational effectiveness and policy making. The research suggests that increasingly, job-related stressors yielded insight into turnover and understanding employee dissatisfaction (Gianakos, 2002; Karasek & Theorell, 1990). Kyriacou and Sutcliffe (1977) proposed that

stressors were a function of the demands on the teacher ,while stress was often discussed in terms of a lack of satisfaction with the profession (Certo & Fox, 2002; Chittom & Sistrunk, 1990; Cooley, 1996; Fox & Certo, 1999; Hirsch, 2005; Hirsch & Emerick, 2006a, 2006b; Kim & Loadman, 1994; National Commission on Teaching and America's Future, 2003; Shann, 1998). In their work on burnout, Maslach, Schaufeli, and Leiter (2001) identified exhaustion as a key response to chronic exposure to interpersonal stressors on the job. Additionally, the findings connected this to job withdrawal (e.g. absenteeism and turnover) and ultimately to a decrease in job satisfaction that was characteristic of an erosion of engagement. Other research suggests that the perceptions of leadership behavior could also be a source of dissatisfaction and stress for the novice teacher (Hallinger, Bickman, & Davis, 1996; Hallinger & Leithwood, 1998; Hallinger & Murphy, 1987; Hirsch, 2005; Hirsch & Emerick, 2006a, 2006b; Ingersoll, 2001; Mullican & Ainsworth, 1979). Therefore, understanding the delicate dance between teacher dissatisfaction and effective principal leadership assumed new meaning as principals work to foster faculty stability and improve student achievement.

A gap exists in the literature with regard to stress and dissatisfaction. Studies of elementary schools dominated the research (Butterworth & Weinstein, 1996; Chrispeels, 2002; Burch & Spillane, 2003; Wheelan & Kesselring, 2005). Framed within the culture of accountability, however, the findings from elementary school participants may not generalize to their secondary counterparts. Additionally, Byrne (1992) established that stress among secondary teachers was substantially different from stress among teachers in lower grades. As noted earlier, teacher stress and dissatisfaction have been well documented in elementary education teachers (Raschke, Dedrick, Strathe & Hawkes, 1985; Thomas, Clarke, & Lavery, 2003); the same is true for the research in teachers of special education students (Billingsley, 2004; Billingsley, Carlson

& Klein, 2004; Brownell, 1997; Cross & Billingsley, 1994; Edmonson & Thompson, 2001; Ingersoll, 2003; Miller, Brownell, & Smith, 1999; Murnane & Steele, 2007; Nelson, Maculan, Roberts & Ohlund, 2001; Otto & Arnold, 2005; Westling & Whitten, 1996), in at-risk schools (Darling-Hammond & Post, 2000; Dworkin, Haney & Telschow, 1988; ) and in other countries like Australia (Goddard & Goddard, 2006; Howard & Johnson, 2005; Naylor, 2001; Tuettemann, 1991), Canada and Sweden (Brenner & Bartell, 1984), the Caribbean (Richardson, 1997), China (Ouyang & Paprock, 2006), England (Rhodes, 2004), Hong Kong (Tang & Yeung, 1999; Wong, 1989), India (Bindhu & Sudheeshkumar, 2006; Kudva, 1999), Israel (Bogler, 2000; Gaziel, 1993; Kremer-Hayon & Goldstein, 1990), Malta (Borg & Riding, 1991), New Zealand (Whitehead, Ryba, & Driscoll, 2000), Nigeria (Ololube, 2006, 2007), Scotland (Wilson, 2002) and the Netherlands (Evers, Tomic, & Brouwers, 2004). The examination of teacher stress and dissatisfaction is notably absent from the empirical literature.

The primary purpose for this study was to examine the relationship between leadership behavior as perceived by novice secondary teachers and stress in novice secondary school teachers. Thus, to maintain focus on the intent of this study, Chapter Two was organized into two distinct sections. First, a number of specific topics that related to principal leadership was explored. Topics included an introduction, principal buffering, transformational leadership behavior, initiating leadership behavior and consideration leadership behavior, the influence of principal leadership on teacher satisfaction, and principal leadership preparation. Second, several specific topics that related to teacher stress were explored. These included an introduction, demographic influences on teacher stress, organizational influences on teacher stress, and perceptions of principal leadership, followed by a summary of the chapter.



## **Principal Leadership**

### ***Introduction***

Educational leadership has traditionally been held accountable for key indicators of school health (Leithwood & Riehl, 2003) with principal leadership touted as the profound influence on improved learning and teaching environments (Cotton, 2003). Similarly, the work of Darling-Hammond and colleagues (2007) identified two ways in which principal leadership affected classroom outcomes. “First, through the selection, support, and development of teachers and teaching processes, and second, through processes that affect the organizational conditions of the school” (Darling-Hammond, LaPoint, Meyerson, Orr, & Cohen, p. 14). The National School Boards Association (NSBA) reported, in its annual survey of urban school climates, that leadership was generally accepted as a key influence of organizational success (NSBA, 2008a, 2008b). In their 1997 report on job satisfaction, the National Center for Education Statistics revealed that many factors contributed to teacher job satisfaction, including supportive principal leadership. Adams (1992) affirmed this stance by describing principal leadership as that which improved faculty morale through the management of various contingencies present in the organizational environment. Clough (1998) offered ten key leadership behaviors crucial to healthy organizational relationships, including valuing teachers as individuals and thanking them for good work. Additionally, the principal’s praise was often mentioned as a variable affecting the work of teachers (Blase & Kirby, 1992; Kouzes & Posner, 2003), while a simple increase in recognition was a powerful motivational tool that often resulted in boosted morale (Scarnati, 1994; Whitaker, Whitaker, & Lumpa, 2000). Thus, because principal leadership was socially embedded, it implied a relationship with others in the organization (Hallinger & Heck, 1996; Leithwood & Duke, 1999).

The study of leadership has shifted its focus from singular examinations of positional supervisory leadership (Boal & Hooijberg, 2001; Bolman & Deal, 2003; Heck, 1998; Heck & Marcoulides, 1992; Hollander & Offermann, 1990; House & Aditya, 1997; Timperley, 2005) to more contemporary approaches emphasizing relational leadership (Bass, 1985; Bennis & Nanus, 1997; Bryman, 1992; Clift, Johnson, Holland & Veal, 1992; Conger, 1999; DuFour & Eaker, 1998; Friedkin & Slater, 1994; Griffith, 2003; Hart, 1992; Kouzes & Posner, 2003; Kouzes & Posner, 2007; Murphy, 2001). Current research has redirected the focus from an examination of the person holding a position of leadership to an assessment of the contextual setting of leadership (Blase, 1987; Boal & Bryson, 1988; Bolman & Deal, 2003; Friedkin & Slater, 1994; House & Aditya, 1997), the behavioral intricacies of leadership (Boal & Hooijberg, 2001; Connelly, Gilbert, Zaccaro, Threlfall, Marks, & Mumford, 2000; Friedman, Fleishman, & Fletcher, 1992; Hooijberg, Hunt, & Dodge, 1997), and leadership perception studies (Bass, 1985, 1990; Blake & Mouton, 1964; Brown & Sikes, 2001; Grint, 2001; House & Mitchell, 1974; Knight & Hosen, 1985; Richardson & Sistrunk, 1988; Stogdill, 1974). It is important to note that attempts to categorize leadership theory have been resistant to rigid, static classifications. Instead, boundaries of these categories seemed to be fluid, dynamic, and not mutually exclusive (Bensimon, Neumann, & Birnbaum, 1989). Thus, a central assumption regarding the literature on organizational leadership is that leadership behavior made a difference to organizational effectiveness (Mullican & Ainsworth, 1979; Zaccaro & Klimoski, 2001).

### ***Principal Buffering***

Contextual settings should consider the reciprocal relationship between organizational environmental factors and leadership (Boal & Bryson, 1988). Some would assert that this dimension was missing in many leadership studies (Blase, 1987; Zaccaro & Klimoski, 2001). Leithwood, Jantzi, and Steinbach (2002) searched contemporary research for empirical evidence

of principal leadership practices evaluated against current national standards. A by-product of their review was a list of 121 principal leadership practices that were deemed important to effective leadership. The list included listening with sensitivity to teachers' concerns, motivating staff, sustaining morale, and rewarding accomplishments. Additionally, Leithwood and his colleagues asserted that principals should buffer their teachers against the stresses of legislated accountability initiatives. Blase and Kirby (1992) perceived effective principal leadership to include the preservation of instructional time, assistance with discipline issues, empowerment of the teaching faculty to develop policies and procedures, and support as teachers seek to enforce them. Similarly, Interstate School Leaders Licensure Consortium (ISLLC) identified critical functions of the principal leader that included supervision of instruction and "[ensuring] teacher and organizational time is focused to support quality instruction and student learning" (CCSSO, 2008, p. 2).

Rosenholtz and Simpson (1990) argued that organizational context had the greatest impact on novice teachers, and they gave priority specifically to administrative support. In their study examining teacher commitment, 1,213 elementary teachers throughout Tennessee were surveyed. Their responses on a five-point Likert scale indicated that novice teachers were most sensitive to boundary issues that defined their instructional role. Boundary issues "may include attending to the material requirements of instructional programs, providing clerical assistance for routine paperwork, mobilizing outside resources to assist teachers with nonteaching tasks, and protecting classroom time from unnecessary interruption" (Rosenholtz & Simpson, p. 245). Additionally, how the school managed student behavior and discipline was a boundary for issue for novice teachers. Principal leadership that assisted novice teachers with "survival needs" at the boundary of their core instructional tasks was crucial for the novice teachers. Thus, the primary

contribution of school principals was that of buffering. Buffering represented the principal's conscious effort to filter extraneous matters that intruded upon the teacher's core instructional tasks. A parallel concept was task autonomy and discretion, or the freedom and independence to perform core instructional tasks. The centrality of principal leadership to organizational context was suggested by the highest inter-correlations among these two organizational factors-principal buffering and task discretion and autonomy. Additionally, principal buffering and discretion and autonomy were the two highest correlates of teacher commitment ( $r=.63$  and  $r=.61$  respectively). Although Rosenholtz and Simpson found that the novice teacher was less concerned with autonomy than a veteran teacher, the novice was more focused on the boundary issues connected to the achievement of their core instructional tasks. Thus, for novice teachers, administrative support drove their perception of organizational context.

Lee, Dedrick, and Smith (1991) affirmed the importance of buffering by the principal in their exploration of organizational context, self-efficacy, and job satisfaction. Efficacy was operationally defined as one's perception of expected success in a task, while satisfaction was the affective response to the achievement of that goal. Their guiding question examined the mitigating factors that influenced teachers' control over their classroom environments. From a sample of 8,488 teachers, Lee and his colleagues found that principal leadership was positively associated with both efficacy and control. In other words, self-efficacy was high in schools with strong leaders. Additionally, efficacy was dependent on teachers' degree of control. One interpretation focused upon two primary functions of principal leadership: buffering and delegating. Teacher autonomy was a function of buffering by the principal, allowing teachers control in managing their own classrooms. Strong principal leadership also delegated tasks in an effort to build leadership capacity within the teaching faculty. Lee, Dedrick, and Smith found

this to be particularly true in secondary schools where strong leaders were more likely to foster innovation and discourage conformity. Thus, the secondary teacher perceptions of principal leadership were often linked to their perceptions of the buffered organizational context.

### ***Transformational Leadership Behavior***

In an examination of popular research traditions in leadership, Bensimon, Neumann, and Birnbaum (1989) placed transformational leadership in a subset of power and influence theory that they labeled as social exchange theory. Their premise emphasized the reciprocal relationships between leaders and followers, where leadership was linked to the expectations of the followers. Additionally, transformational leadership engaged the followers at a level that merged the purposes of leader with those of the followers. James Burns (1978) explained transformational leadership as that which sought the potential in followers while satisfying and engaging them. Bennis and Nanus (1997) expanded the view of transformational leadership to include four leadership strategies: (a) developing a vision with attention to results, (b) conveying meaning through communication, (c) gaining trust through accountability, reliability, and constancy, and (d) emphasizing strengths while minimizing weaknesses. Consistent across the aforementioned conception of the theory is a belief that “transformational leadership creates performance beyond expectation and induces additional effort by sharply increasing subordinate confidence and by elevating the value of outcomes for the subordinate” (Bensimon, Neumann, & Birnbaum, p. 11).

Transformational leadership behavior is aligned with followers’ intrinsic values (Boal & Bryson, 1988; Hooijberg, Hunt, & Dodge, 1997; Nield, Useem, & Farley, 2005). Burns (1978) proposed that transformational leaders possessed a powerful moral connection. Along with a growth in popularity, the term transformational leadership has evolved to mean innovative or motivational leadership. The transformational leader according to Bensimon and colleagues,

recognized that a transformed or converted follower and an organizational culture of teacher support were the ultimate end results (Bensimon, Neumann, & Birnbaum, 1989). Fullan (2003) advocated several dimensions that underscored the foundational moral component, including: (1) moral purpose as a requirement of long-term success, (2) relationship-building and its importance in purposeful problem-solving and decision-making, (3) core organizational values that share knowledge, and (4) coherence-making within the organizational members. Leithwood, Louis, Anderson, and Wahlstrom (2004) cautioned against describing leadership with adjectives and suggested instead that the “labels primarily capture different stylistic or methodological approaches to accomplishing the same two essential objectives critical to any organization’s effectiveness: helping the organization set a defensible set of directions and influencing members to move in those directions” (Leithwood, et al., p. 4).

In the development of an instrument to assess principal leadership behavior, Hallinger and Murphy (1987) generated a list of ten principal leadership descriptors that aligned with those noted by the transformational theorists, including: (1) effectively framing school goals that focus on student achievement, (2) formally and informally communicating school goals, (3) continually monitoring student progress based on standardized assessments, (4) proactively working to translate school goals into classroom practice, (5) constantly aligning curriculum with school goals, (6) aggressively protecting instructional time by limiting interruptions, (7) persistently maintaining high visibility on campus, (8) thoughtfully providing incentives for teachers that do not include monetary rewards, like praise, recognition, and honors, (9) clearly defining and enforcing high expectations for student achievement, and (10) positively rewarding academic achievement. The researchers examined ten elementary school principals in a single school district through a survey of the teachers and the principals. Several general patterns

emerged. Principals were more involved with curriculum management and supervision of instruction than previously thought. Additionally, most of the schools involved in the study had no formal policies or practices that buffered or protected the instructional time from interruptions. Public recognition of outstanding teacher efforts rarely occurred.

Principal leadership also facilitated collaboration and supportive networks of the teachers. Friedkin and Slater (1994) studied twenty California elementary schools and empirically linked principal leadership to the collegial interactions of the teachers. They contended that the informal foundations of principal leadership were critical in two ways: the principal's leadership behavior as he dealt with problems at the classroom level and the principal's involvement with the implementation of the curriculum and instructional activities. They concluded that an effective principal shaped the organizational context of a school and was accessible to his teaching staff which, in turn, fostered a highly collaborative school faculty. Conversely, a negative organizational environment could be directly related to an unsupportive principal (Jackson, 1983; Pahnos, 1990). Thus, principal leadership influenced the collegial dimension of the organizational context.

Principal leadership that aligned the teachers' collaborative efforts with the school's mission was also examined. Friedman, Fleishman, and Fletcher (1992) evaluated specific tasks and the leadership behaviors required for those tasks. They defined three categories of leadership tasks that includes project management, supervision of personnel, and strategic planning. The leadership behavior associated with each task was also identified, with supervision of personnel requiring the most complex leadership behavior. The leadership behavior included social sensitivity, resisting premature judgments, and fact finding abilities. Similarly, Leithwood and Riehl (2003) specified three components of principal leadership that developed staff: (a) offering

intellectual stimulation to heighten faculty awareness of discrepancies between current and desired practices, (b) providing individualized support to assure the faculty that principal leadership is committed to support them through difficulties, and (c) providing an appropriate model emphasized consistency with the organizational norms and values. Leithwood and Riehl's conceptualization aligned with a contemporary transformational view of principal-teacher interactions that included four components: teamwork that coordinated productive activities of the organization, identification and development of marginal teachers, identification and promotion of successful teachers, and staff development that aligned with the school's mission (Blair, 1991).

Principal leadership has been linked to faculty stability. In a longitudinal qualitative study of eight New York principals, Quinn (2005) empirically linked principal leadership behavior and teacher retention. Over a five-year period demographic data were collected that included student achievement data and teacher stability data, along with interviews from the eight principals and a sample of teachers at each school. Quinn classified the schools into one of two groups: (a) achieving schools that were defined by stable faculties with low teacher turnover, staff involvement in decision-making, and induction programs for new teachers, and (b) struggling schools that were defined by the absence of teacher induction programs, teacher turnover exceeding 25%, and limited opportunities for staff involvement in decision-making. The qualitative results revealed principal behavior, including (a) listening, (b) valuing teamwork and supporting relationships, and (c) emphasizing innovative strategies for developing teachers was linked to stable faculties with low turnover. Additionally, the principals of the achieving schools had induction programs founded upon an ongoing cycle of training, a network of supplies and resources available to the novice teacher, and a culture of collaboration. Thus, principal



leadership could not only drive organizational learning, but could also influence the recruitment and retention of teachers.

### ***Initiating Structure and Consideration Leadership Behavior***

Bensimon, Neumann, and Birnbaum (1989) placed the Ohio State University leadership studies at the cusp of two overlapping research traditions: behavioral theory and contingency theory. Behavioral theory traditionally identified leadership as directive or participatory, with an emphasis on accomplishing tasks or growing individual satisfaction. Contingency theory emphasized the importance of situational conditions. Bensimon and the other researchers perceived the overlap to exist because behavior can depend upon the situational variables or contingencies. Additionally, the Ohio State University leadership studies provided the foundation for many contemporary theories of leadership. Thus, Bensimon and colleagues considered the Ohio State University leadership studies to be the most influential in the behavioral tradition. Two foundational components of leadership behavior were articulated by Stogdill and Coons (1957) in their work at Ohio State University. Stogdill and Coons identified two essential aspects of leadership behavior: *initiating structure* describing task oriented leadership behavior and *consideration* describing relationships. Both constructs, when considered in tandem, are considered to create a near complete picture of leadership behavior (Stogdill, 1970). Additionally, their research yielded an instrument, Leadership Behavior Description Questionnaire (Stogdill, 1963), designed to assess leadership behavior along the two dimensions.

Initiating leadership behavior and consideration leadership behavior are often statistically interconnected (Bass, 1990; Blase, 1987, Brown & Sikes, 2001). A less ambiguous work context was correlated with initiating leadership behavior (House, Filley, & Kerr, 1971). An analysis of perceived leadership behavior of department chairs revealed that the most effective college department chairpersons rated high on both initiating leadership structures and consideration on

the Leadership Behavior Description Questionnaire (Knight & Holen, 1985). Additionally, job satisfaction and consideration were found to have a strong positive correlation, while satisfaction correlated negatively with initiating structures (Brown & Sikes, 2001; Childers, Dubinsky, & Skinner, 1990; Holdnak, Harsh, & Bushardt, 1993; Pool, 1997). Some researchers have explored the influence of external variables like sex and organizational position (Lucas, Messner, Ryan, & Sturm, 1992). Lewis and Fagenson-Eland (1998), for example, found that males perceived themselves as higher in initiating structures, yet gender accounted for only nine percent of the variance in their ratings of initiating structure behavior. Additionally, organizational level accounted for four percent of supervisors' rating of leaders' consideration behavior.

Blase (1987) examined principal leadership from the teacher's perspective in a two and one-half year longitudinal study of teachers in an urban high school situated in the southeastern United States. This grounded theory approach thematically analyzed the data along two constructs that closely parallel initiating structures and consideration structures. Blase pointed out that the data were analyzed along these two dimensions after they had been collected; thus, the themes were emergent. The first dimension of leadership, *task-relevant competencies*, described behaviors related to planning, defining, and organizing. The second component of leadership, *consideration*, described behaviors that recognized people and enhanced their job satisfaction. Nine task-related factors emerged, including:

- (1) Accessibility which included availability and visibility. Accessible principals were perceived as informed and their decisions therefore were likely to be respected. Additionally, highly visible principals realized fewer student discipline issues;

- (2) Consistency which included the alignment of the principal's leadership with policies and organizational norms;
- (3) Knowledge and expertise which referred to competencies in curriculum and contemporary research;
- (4) Clear and reasonable expectations which referred to the realistic assessment of teachers in the creation of policies, goals, and standards;
- (5) Decisiveness which described the willingness to make decisions in a timely, beneficial fashion;
- (6) Goals and direction which described the global understanding of the need for common goals based on shared values;
- (7) Follow-through, which was a category associated with the principal's ability to provide appropriate and timely resources;
- (8) Ability to manage time which acknowledged that the principal was not in the habit of over-committing themselves during the school day; and,
- (9) Problem-solving orientation which was associated with the ability of the principals to interpret and conceptualize problems and communicate those issues of interest effectively to the faculty. Additionally, this component had a clear impact on reducing barriers to teacher performance which, in turn, eased the levels of teacher stress.

Five consideration-related themes were framed by the data, including:

- (1) Support in confrontations and conflict, which referred to the willingness of the principal to stand behind the teachers, especially in regards to confrontations with

students and parents when discipline and academic assessment were called into question;

- (2) Participation and consultation, a category that described the principal's acceptance of shared decision-making and the encouragement to participate;
- (3) Fairness and equitability, which were strongly interrelated concepts. Fairness, however, was specific to avoiding favoritism while equitability was connected to treatment in areas like job assignments;
- (4) Recognition as praise and reward, which included face-to-face interactions as a group and individually; and,
- (5) A willingness to delegate authority, which did not refer to dumping meaningless responsibilities on others. It did, however, address the extension of formal authority to the teachers.

It is important to note that the sample was relatively small (N=75-80), and the average experience of the teachers was 11 years. Interestingly, the data showed that effective principal leadership exhibited all of the task and consideration factors. Thus, the leadership behavior not only influenced teacher motivation, involvement and morale, but the behaviors were highly interdependent.

### ***Principal Leadership and Teacher Satisfaction***

Job satisfaction has been defined as an affective response to one's current job placement and can be a reliable predictor of effective schools and teacher retention (Hall, Pearson, & Carroll, 1992; Ostroff, 1992; Zigarreli, 1996). Hence, one general belief is that high levels of job satisfaction give rise to strong organizational commitment, as evidenced in the presence of three factors: a strong belief and acceptance of the organization's goals and values, an eagerness to work diligently for the organization, and an interest in remaining with the organization

(Crewson, 1997; Moon, 2000). Similarly, job satisfaction has been identified as closely related to morale and is often included in an operational definition (Coughlan, 1970), while administrative support and leadership remain among the most often cited working conditions perceived as influences on teacher job satisfaction (Eberhard, Reinhardt-Mondragon, & Stottlemeyer, 2000; Karge & Frieberg, 1992; Krueger, 2000; Perie & Baker, 1997).

Herzberg's (1966) two-factor Motivation-Hygiene Theory of job satisfaction evolved from an empirical study of engineers and accountants in Pittsburgh. Job satisfaction was independent of job dissatisfaction. Satisfaction was linked to the intrinsic nature of the work and was often expressed as achievement, recognition, responsibility, and advancement. By comparison, dissatisfaction was linked to the context within which the job was done and was expressed in working conditions, salary, administrative practices, company policies, and interpersonal relationships. Thus, the removal of a dissatisfier was classified as a hygiene factor because it prevented dissatisfaction rather than representing a satisfier. Additionally, the presence of a satisfier served as a motivator while having no impact upon dissatisfaction.

Some teacher satisfaction research has been conducted in foreign educational systems. The work of two researchers merits inclusion in this review. First, Nias (1981), in a qualitative study of 99 primary teachers in England, found substantial support for Herzberg's Motivation-Hygiene Theory of job satisfaction. Almost 100% of the participants mentioned that they derived satisfaction from the work itself. Specifically, 70% mentioned satisfaction in assisting students to learn, and 80% mentioned satisfaction that originated from being with children. By contrast, only 10% noted the working environment, while 100% mentioned weak principal leadership, with 50% also identifying associated stress and fatigue. Second, Bogler (2000) quantitatively studied 930 teachers in northern Israel to assess levels of job satisfaction. She established that

organizational variables (i.e., school size, school level, and school location) and personal variables (i.e., gender, religion, experience and seniority, and age) were intervening variables upon perceived job satisfaction. Discriminant function analysis revealed that the teacher's occupational perception had the largest effect on job satisfaction followed by the principal's leadership style. Additionally, patterns of satisfaction among males and females emerged, with males having the lowest satisfaction and females deriving the highest degree of job satisfaction. Interestingly, 36.3% of the high school teachers reported low job satisfaction, while only 16.2% reported high job satisfaction.

In a follow-up study of 222 Israeli teachers, Bogler (2000) assessed the teachers' perceptions of their principal's leadership as transformational or transactional. Transactional leadership was also referenced as managerial. It was well-ordered around rules and regulations (Marion, 2002). Those teachers with high levels of job satisfaction were more likely to identify their principals with transformational leadership. In contrast, teachers with low levels of satisfaction reported principals with transactional leadership profiles.

In a qualitative study that collected data from teachers in an urban high school in the southeastern United States, Blase (1987) identified two dominant themes that paralleled the initiating structure and consideration leadership behaviors. The first dimension was task-relevant competencies that were embedded in leadership activities like planning, organizing, and performance evaluation. The second aspect was consideration and included activities that served to amplify work satisfaction. The general conclusion supported the notion that leadership influenced teacher motivation, involvement, and morale.

### ***Principal Leadership Preparation***

Principal leadership matters (Hirsch & Emerick, 2007). Assessment driven accountability initiatives embedded in NCLB have placed modern principal leadership in a high-

profile role (CCSSO, 2008). The Southern Regional Education Board (SREB), founded in 1948 as a nonprofit, nonpartisan organization, recognized the foundational role of principal leadership in building and sustaining effective schools. Toward that end, SREB pursued several initiatives to improve the preparation and certification of future principal leadership (Southern Regional Education Board, 2002). Additionally, SREB articulated five indicators of progress toward the goal of preparing effective principal leadership to include development of university leadership preparation programs and rigorous licensure procedures. Interstate School Leaders Licensure Consortium (ISLLC) published *Standards for School Leaders* that were updated in 2008 (CCSSO). ISLLC asserted that the key to successful principal leadership preparation programs was clear standards and goals. A case-study of eight successful principal leadership programs in the United States supported that stance (Darling-Hammond, LaPointe, Meyerson, Orr, & Cohen, 2007). Thus, clear expectations were articulated in professional standards, facilitating strong principal leadership preparation.

Effective principal leadership has also been found to promote improved teaching. Moreover, research showed school leadership was second only to classroom instruction in shaping student outcomes (Council of Chief State School Officers, 2008). Leithwood and his colleagues (2004) established that quality principal leaders achieved this impact by setting organizational direction and culture. Successful principal leadership preparation programs incorporated strategies that developed people professionally. Additionally, the effective principal established high expectations by developing teachers through strong goals and a sense of purpose while also providing the required support and resources to realize success (Leithwood et al., 2004). The Council of Chief State School Officers (2008) affirmed that stance: “Strong education leaders also attract, retain, and get the most out of talented teachers” (CCSSO, p. 9).

Recent research has also highlighted the importance of principal leadership preparation programs. For example, Orr (2006) surveyed two national samples of school principals. One group had completed exemplary *innovative* leadership preparation programs (N=246) and the second *comparison* group was drawn from a national list of school principals (N=661). The participants responded to a survey designed around seven categories: demographic characteristics of the principals prior to preparation, features of the preparation experiences, dimensions of leadership that graduates have learned and their leadership beliefs, effective leadership practices, strategies for school improvement and organizational climate, recent school improvement changes, and moderating influences.

High quality leadership preparation programs included a well-defined framework of leadership theory, strategies to maximize principal learning, and strong field experiences. Interestingly, the findings also addressed leadership practices. Orr (2006) found that *innovative* principals worked longer hours and spent more time developing the instructional capacity of their teachers than the *comparison* principals. Specifically, the *innovative* principals averaged the largest amount of time “developing curriculum and instruction, evaluating teachers, and working with teaching staff to solve problems” (Orr, p. 22). Additionally, both groups of principals felt teacher commitment and appreciation to be one of four qualities that characterized their schools.

Exemplary leadership preparation programs were characterized as a series of outcomes to include (1) learning leadership and developing positive beliefs about the principalship, (2) aligning leadership practices with research, (3) maintaining a positive organizational climate, and (4) realizing success in teacher effectiveness (Orr, 2006). Orr emphasized the interconnectedness of the leadership outcomes as each outcome served as a mediating influence for the next. Principal leadership, therefore, has been affirmed as an important influence on the learning and



teaching environments. Additionally, the organizational conditions of a school were influential to the selection, support, and development of teachers and teaching processes (Darling-Hammond, et al., 2007).

## **Teacher Stress**

### ***Introduction***

Stress can be a vague term used to describe a wide range of ambiguous conditions (Kahn, 1987). Hansen and Sullivan (2003) described the primary component of stress as the *stressor*. This was an explicit reference to an external event. It was generally agreed that stress was an “additive concept” (Karasek & Theorell, 1990; Schuler, 1982). In other words, the greater the number of stressors to which one is exposed, the higher the stress level. According to Rosenholtz and Simpson (1990), novice teachers were concerned primarily with survival issues, and their professional insights were limited by their inexperience. Therefore, the typical stressors that teachers regularly confronted tended to be magnified for the novice (Fuller, 1969).

Much of the literature attempted to operationally define occupational stress by outlining a set of *a priori* events that aligned with traditional career expectations. As an example, Albrecht (1979) identified workload, satisfaction, accountability, job status, human contact, and degree of challenge as variables to be considered in the formulation of a sound working definition.

Pettegrew and Wolf (1982) condensed the stressors into three categories: role-related stressors, which described the congruence of the teacher’s expectations and the actual work, task-based, which stressors referred to difficulties associated with the completion of teaching tasks, and teaching events stressors, which addressed the troublesome situations that arose in classrooms.

Kahn (1987) proposed eight broad categories of stressors that included the intrinsic properties of the work itself, role characteristics, interpersonal relations, lack of resources and equipment, work schedules, organizational climate and work deprivation. The list itself was not

intended to be finite but rather an open-ended, fluid directory. In contrast, Calabrese (1987) clustered the stressors into similar categories: the teacher's relationship with the school leadership, the teacher's organizational relationship, and the teacher's relationship with the students in the instructional setting. Oi-Ling (1996) identified the stressors associated with teaching and grouped them into four general categories: administrative support, professional distress, financial security, and student discipline.

Some viewed negative public perceptions as the origin of teacher stress (Iwanicki, 1983). In a national survey of 10,270 parents, the National School Board Association (NSBA, 2008a, 2008b) found that negative publicity informed parents' views on teaching, with only 57% of parents believing that teachers cared about their child's success. Fimian and Blanton (1987) generally grouped stressors into two broad categories: personal variables that included demographic data on the teacher (e.g., sex and age), and organizational or professional variables (e.g., number of students taught and grade level assignments). The remaining discussion is organized around Fimian and Blanton's categories.

### ***Demographic Influences on Teacher Stress***

Many contemporary researchers made mention of demographic influences on teacher stress. The research of Borg and Riding (1991) is an example. In a survey of 710 Maltese teachers, Borg and Riding reported that veteran teachers with more than twenty years of experience in the classroom experienced greater stress than teachers with less than eleven years of experience. Additionally, younger teachers were more likely to leave the profession than older teachers (Maslach, Schaufeli, & Leiter, 2001).

Some of the extant literature established an association between race and teacher recruitment. Adair (1984), for example, identified a specific set of organizational expectations uniquely connected to the professional identity of the African-American teacher:

“Traditionally the Black teacher has played multiple roles in schools. Among these have been teacher, parent surrogate figure, counselor, disciplinarian, and modeling figure. These roles have been anchored in a collective Black identity where these teachers perceive the success or failure of their pupils as gains or losses to the Black community...The teachers view themselves as ethnically responsible for preparing these youth...” (p. 122).

Additionally, Irvine (1988) established that there has been difficulty recruiting and retaining African-American teachers. As an example, Florida Agricultural and Mechanical University, a university with an historic mission to educate African-American students (Florida A & M Mission Statement, 2009), had over 300 education majors graduate in the 1960s. However, by 1985, the number of education majors was under 100 (Rodman, 1985). The pool of African-American teachers was shrinking and reflected a corresponding decline in the rate at which African-American students enrolled in college (Baratz, 1986). Graham (1987) further affirmed the declining numbers of African-American teachers. In the 1970s and 1980s, eight percent of public school teachers were African-American. By 1987 that percentage declined to only seven percent (Graham). By 2005, the number of African-Americans majoring in education was dropping at twice the rate of decline for White teachers (Dee, 2005). Declining numbers of African-American teachers converge upon the high school as the incubator of not only prospective college students, but also of prospective teachers (Baratz, 1986). Additionally, a corresponding deficit is likely to be realized in the number of African-American principals, since the job requirement traditionally requires teaching experience (Irvine, 1988).

The gender of the novice teacher was also found to be a factor in terms of stress in novice teachers (Dussault, Deaudelin, Royer, & Loiselle, 1997). Maslach and his colleagues (2001)

found that females were more likely to report exhaustion, with excessive workloads having the most direct influence. Borg and Riding (1991) found that female teachers in Malta reported greater job satisfaction than their male counterparts, while gender interacted significantly with the following stressors: student discipline and misbehavior, time and resource constraints, professional recognition needs, and poor professional relationships. For female teachers, student misbehavior was a more significant stressor, while male teachers perceived the first three stressors to be considered equally.

Some current literature argued a different conclusion. As an example, Friesen and Williams (1985) found, in a survey study of teachers in an urban school system (N=759), that stressors in the teachers' personal life (i.e., those considered to be separate from professional stressors by the teacher) were statistically significant predictors of overall stress, yet a background variable like gender, did not contribute to the overall stress in the teacher. In a survey of 225 female elementary teachers, Wangberg, Metzger, and Levitov (1982) established that the predictive power of work-stress models broke down when the subject sample consisted of women. Thus, the extant literature offered conflicting results with regard to the gender of the teachers and its relationship to the teachers' stress.

The relationship between marital status and the teachers' retention in the profession has been examined in the literature, with divergent opinions (Betancourt-Smith, Inman, & Marlow, 1994; Bloland & Selby, 1980). Maslach and Jackson (1981) found that job stress often created discord in the home life and impacted the teacher's job performance, while others identified balancing family demands with the time constraints of the job as a stressor (Hewitt, 1993; Kremer-Hayon & Goldstein, 1990; Farber, 1984; Thomas, Clarke, & Lavery, 2003; Zhou & Wen, 2007). Martray and Adams (1981) yielded different results in a survey utilizing the

Teaching Events Stress Inventory (TESI) with teachers in 23 school systems. They found that marital status did not have any significance to stress for teachers. Therefore, the relationship of the teachers' marital status to their retention in the field of education is also presented in the literature with conflicting results.

### ***Organizational Influences on Teacher Stress***

Task-based stressors and teaching events stressors were closely related to the educational policies that were in place in the working environments (Pettegrew & Wolf, 1982). Fiore and Whitaker (2005) affirmed that stance, stating:

“A lack of authority to make decisions about curriculum, assessment, and policy, leads both experienced and novice teachers to doubt their professional status. These feelings of doubt are enhanced when teachers feels the pressure of accountability without some degree of buffer from the principal “(p. 37).

Rosenholtz (1989) also framed the motivation of teachers within the organizational design. “To enhance workplace commitment, people must also experience personal responsibility for the outcomes of work” (p. 423). Additionally, professional isolation was a significant stressor for teachers (Dussault, Deaudelin, Royer, & Loiselle, 1997). Thus, for teachers, there was a link between professional empowerment and dissatisfaction.

Coates and Thoreson (1976) examined anxiety that was specific to teachers. They proposed that novice teacher anxiety could be categorized into five general concerns. Novice teachers self-reported anxieties regarding classroom discipline, acceptance by their students, familiarity with the curriculum content, making a public misstep with students, and acceptance by other senior faculty. Coates and Thoreson posited that experienced teachers had different sources of anxiety. The experienced teacher was more likely to be anxious regarding discernment

of their students' capabilities and their ability to successfully meet the academic needs of their students.

Sources of stress for teachers were also embedded in the responsibilities of the job. Large class size and student misbehavior were often cited as significant stressors (Borg & Riding, 1991; Friesen & Sarros, 1989; Friesen & Williams, 1985; McCormick & Solman, 1992; Raschke, Dedrick, Strathe, & Hawkes, 1985). Additionally, Mont and Rees (1996) completed a discrete hazard analysis to determine correlates of teacher turnover. They found that average class size, number of classes taught and the proportion of classes taught in the teacher's certification area were accurate measures of stress. The annual MetLife survey of novice teachers (Metropolitan Life, 2005) affirms the connection of workloads to teacher stress. The MetLife survey identified the greatest sources of teacher stress included classroom management, student behavior, time constraints, and unrealistic workloads. Evers, Tomic, and Browers (2004) randomly sampled Dutch students, ages 16 to 23, to assess their perception of teacher stress. They found that the students' perceptions of disruptive student behavior were significantly related to the patterns of teacher stress.

The sources of stress for novice secondary teachers may differ from the sources of stress for novice elementary teachers. In a survey of 641 first-year teachers, the National Comprehensive Center for Teacher Quality (NCCTQ) and Public Agenda (2007) found that novice secondary school teachers were more likely to experience stress from low student motivation than their elementary counterparts and less likely to regard teaching as a long-term career choice. NCCTQ and Public Agenda also established that novice secondary teachers were more likely to view unmotivated students and student misbehavior as noteworthy stressors.

Additionally, effective student discipline was also empirically linked to administrative support (Ingersoll, 2001; Kersaint, Lewis, Potter, & Meisels, 2007; Liu & Meyer, 2005).

Salary was frequently identified as a source of dissatisfaction for teachers (Ingersoll, 2001, 2003; Mont & Rees, 1996; National Commission on Teaching and America's Future, 2003; Southern Regional Education Board, 2001), yet there was no clear consensus on the role of salary in teacher turnover (Kersaint, et al., 2007). The National Commission on Teaching and America's Future (2003) found that 27% of the teachers in high poverty, urban public schools were concerned with poor salary, while 51% of their counterparts in a low poverty, suburban school expressed the same concern. Liu and Meyer (2005) suggested that teachers were less likely to resign over salary issues when other working conditions were satisfying. In 2007, the NCCTQ and Public Agenda reported that only 33% of all novice teachers surveyed perceived salary as significant. Additionally, NCCTQ and Public Agenda found that 85% of the novice secondary teachers would opt for schools with better student behavior and administrative support over schools with a higher salary.

### ***Perceptions of Administrative Support***

Role-related stressors were closely related to perceptions of administrative support (Pettegrew & Wolf, 1982). In a study of over 1,000 teachers in Vermont and Connecticut, Fimian (1986a, 1986b) confirmed that teachers receiving supervisory support experienced lower levels of stress than those not receiving support. Leithwood, Jantzi and Steinbach (2002) affirmed the importance of principal support to the teacher. Leithwood and his colleagues specified "individualized support to staff" in a list of leadership practices for effective principal leadership. Burch and Spillane (2003) found similar support for the significance of principal leadership support to teachers. The annual MetLife survey (Metropolitan Life, 2005) of 800 new

teachers found 53% were dissatisfied with their principal's leadership and cited this as a reason to leave the profession.

Hirsch (2005, 2006) studied teacher retention in several states. In a survey of 15,000 teachers in South Carolina and 4,200 teachers in Alabama, Hirsch (2006) established that principal leadership, teacher empowerment, facility conditions and resources significantly influenced teacher retention. The strongest positive correlations were established between leadership and teacher empowerment and were powerful predictors of a school's yearly progress. In a study of Philadelphia teachers, only 60% of the new teachers indicated that the principal was sensitive to the unique needs of new teachers (Nield, Useem, & Farley, 2005). Additionally, there were differences in the perceptions of principal support in elementary and secondary teachers. NCCTQ and Public Agenda (2007) found that novice secondary teachers were more likely to be concerned with a perceived deficit of administrative support than their elementary counterparts.

A lack of administrative support was often cited as the primary reason that teachers exited the classroom (Ingersoll, 2001, 2003; Liu & Meyer, 2005; Madsen & Hancock, 2002; National Commission on Teaching and America's Future, 2003; Van Dick & Wagner, 2001). Kersaint, Lewis, Potter, and Meisels (2007) interviewed over 1,000 Florida teachers that left the profession and 1,000 teachers that stayed with teaching. They found that administrative support was a significant factor in teachers leaving the profession. Interestingly, gender influenced this perception. Males that left teaching considered administrative support more important than the females that left teaching. Teachers in high school also considered administrative support as a more influential consideration than their elementary counterparts.



Principal leadership behavior has been examined by Richards (2003, 2005). In a mixed-methods phenomenological study, Richards (2003) interviewed teachers with less than five years experience about their principals' leadership behavior. From the interviews, a list of positive principal leadership behaviors was developed and then subsequently used to identify themes and patterns of leadership behavior. Subsequently, the quantitative portion of the research analyzed the rating by 100 novice teachers and 100 principals. A follow-up to the original research expanded the ranking activity to include teachers with six to ten years of experience and teachers with eleven or more years of experience (Richards, 2005). She found that three strong themes emerged in the original analysis as well as in the follow-up and included: "The Power of Caring, The Power of Respect, and The Power of Praise and Acknowledgment" (p. 23). Additionally, an Analysis of Variance (ANOVA) revealed a significant difference in perception between novice teachers' and their principals on two items. *Supports teachers with parents* was ranked fifth in importance for novice teachers and fifteenth in importance for their principals. A second important issue of disparity focused on student behavior. *Supports teacher in matters of student discipline* was ranked second in importance for the novice teachers and eighth in importance for their principals. While principals valued administrative behavior, teachers were generally found to value emotional and professional support.

The level of administrative support can have a significant influence on teacher stress, satisfaction, and retention (Ingersoll, 2001). Although, teachers differed in their perceptions of principal leadership at various levels of experience, supportive principal leadership was empirically related to satisfied teachers that were likely to remain in the profession (Richards, 2003, 2005). Additionally, there was disparity between the rankings of principal behaviors by teachers and principals. The teachers gave the strongest rating to principals who demonstrated

respect and valued them as professionals. Principals believed that their encouragement to improve was the most significant contribution to teacher (Richards). Thus, principal leadership may be a strong contributor to teacher satisfaction.

### **Summary**

This review of the literature included the background and setting of the problem that is described in this study. The strenuous expectations outlined in NCLB were very clearly evident in the literature and principal leadership was held accountable for school performance indicators. Research linked numerous aspects of teacher satisfaction and retention to effective principal leadership. Fiore and Whitaker (2005) agreed, commenting, “Behaviors of some of the best principals are clearly implicated in what research has shown about reasons teachers give for remaining in the profession” (p. 37). When the legislative mandates were considered in tandem with high rates of attrition, securing highly qualified teachers became problematic for many districts. Therefore, teacher turnover and retention is an on-going concern for all stakeholders in the educational process.

Understanding teacher dissatisfaction and its relationship to chronic exposure to organizational stressors was a key in the design of this study. The difficulty in retaining highly qualified teachers underscored the evolving context of school leadership and the urgent need to thoroughly examine the issues confronting novice teachers. Thus, the guiding question for this proposal: Is there an empirical relationship between perceived leadership behavior of secondary principals and stress in the novice secondary teacher?

## **CHAPTER THREE**

### **Introduction**

The quantitative approach to research is formulated on the post-positivistic assumption that specific variables can be reduced to measureable quantities (Creswell, 2003). This chapter includes the quantitative methodology and procedures that were used to examine the relationship between perceptions of principal leadership behavior and stress in novice secondary teachers. The brief introduction is followed by the purpose of the study, an explanation of the research design, a description of the participants, the instruments to be utilized, the procedures, and the statistical analyses.

### **Purpose of the Study**

The primary purpose of this study was to determine if a significant relationship exists between the perceived leadership behavior of secondary school principals and the stress in novice secondary teachers. Research has linked the teacher's perceptions of principal leadership to teacher retention (Fiore & Whitaker, 2005; Leithwood, Jantzi, & Steinbach, 2002). Supportive principal leadership has been associated with satisfaction and retention of the teacher, while the cumulative effect of stress has been associated with dissatisfaction and teacher turnover (e.g., Betancourt-Smith, Inman, & Marlow, 1994; Hirsch, 2005, 2006; Ingersoll, 2001, 2003). An empirical examination of the relationship between perceived principal leadership and stress in the novice teacher may provide insight into retention and recruitment strategies and programs of principal leadership preparation and practice.

## **Research Design**

Quantitative methods study and compare sources of variation to describe and formulate inferences from empirical observations (Gay & Airasian, 2003). The single question explored was: Is there a relationship between perceived secondary principal leadership behavior and stress experienced by novice secondary teachers? Perceptions of principal leadership are quantified in this study along two variable dimensions: initiating structure behavior and consideration behavior. Teacher stress is operationally defined across ten subscales that identify five sources of stress and five manifestations of stress. The ten subscale measurements were combined for a total composite stress score.

A relationship study looks to understand a complex variable by examining variables that are related to it (Gay & Airasian, 2003). The independent variable was stress in the novice secondary teacher. The dependent variable was the novice secondary teachers' perceptions of their principals' leadership behavior. The independent variable could not be manipulated (Leedy & Ormrod, 2005). Additionally, this relationship study utilized a self-reported survey instrument, *Teacher Stress Inventory and Leadership Behavior Description Questionnaire, Form XII*. The cross-sectional design and an online delivery of the survey were selected for this study because it allowed data collection from a large number of potential participants. Additionally, the employment of a survey permitted the variables to be predetermined (Leedy & Ormrod, 2005).

## **Participants**

The target population for this study was novice secondary teachers in the state of Louisiana. The Louisiana Teacher Assistance and Assessment program (LATAAP) defined a novice teacher as a teacher with one to four semesters of experience. It should be noted that tenure is granted after six consecutive semesters (Louisiana Department of Education, 2008b).

Current data place the total number of novice teachers actively employed in Louisiana public schools at approximately 8,500. Although a breakdown by grade level (i.e., elementary, middle, and high school) was not available, a reasonable approximation places the number of novice secondary teachers at about 2,000 (Saucier, Louisiana Department of Education, personal communication, July 16, 2008).

Purposive sampling was used as a basis upon clear criteria for inclusion in the sample (Gay & Airasian, 2003). The purposive sample for this study consisted of all novice secondary teachers who responded to the self-administered survey in four Louisiana districts. The identifying criteria for this study were twofold. The respondents taught grades 6-12 in a Louisiana public school and had six consecutive semesters of experience or fewer.

It is recommended that correlation studies obtain large samples so that the researcher can maintain the option to examine subgroups with stable results (Gay & Airasian, 2003). An *a priori* power analysis (Cohen, 1988) established the sample size for this study for moderate effect size to be approximately 245. Thus, the ten largest parishes in Louisiana were selected for the purposive sample. Four of the ten parishes granted permission to survey novice secondary teachers. The LATAAP coordinator was then petitioned to electronically forward an email request for participation to all novice secondary teachers (see Appendix H).

The novice teachers in each of the four districts were invited to participate in an online survey through an email forwarded to them by the district LATAAP coordinator. Two hundred seventy one teachers responded initially to the survey questionnaire. The online collection tool, SurveyMonkey<sup>TM</sup>, offered a default setting of the online survey called page skip logic. If the participants selected an answer outside of the sample selection criteria during their completion of the survey, they were taken to an exit page. Eight of those responding did not satisfy the design

criterion for the selection of the sample. They indicated either they were para-professionals or were teaching in elementary grades, kindergarten through grade 5 and were, therefore, taken to an exit page. An additional thirteen surveys were not completed. Thus, a total of 250 complete responses were collected for analysis.

The participants closely resembled the total population of Louisiana classroom teachers in gender, race, and level of education (see Table 1). There are approximately 43,862 classroom teachers in the state of Louisiana. Of that number, 74% are Caucasian and 24% are African-American. Additionally, the population of Louisiana classroom teachers is 82% female and 18% male. Ninety-six percent of the classroom teachers in Louisiana are teaching with certification and 4% are without a certificate. Sixty-nine percent of the teachers in Louisiana hold a bachelor's degree, 21% have earned a master's degree, 8% have earned a master's degree plus 30 hours, and 1% has earned a doctorate. Approximately 1% of the classroom teachers in Louisiana hold less than a bachelor's degree (Louisiana Department of Education, 2008b). The participants included 85% Caucasian and 10% African-American. Additionally, the participants were 89% female and 11% male. The levels of education included within the sample were as follows: 82% with a Bachelor's degree, 15% held a Master's degree, 3or 1.5% with a Master's degree plus 30 graduate hours, and 3or 1.5% novice teachers held a Doctorate.

Table 1

*A Comparison of Teachers in Louisiana and Study Participants:*

*Gender, Race, and Level of Education*

Variable		Participants		Louisiana	
		n	%	N	%
Gender					
	Male	27	11	7,678	18
	Female	223	89	36,183	82
	Total	250	100	43,862	100
Race					
	African-American	26	10	9,159	24
	Caucasian	212	85	34,193	74
	Other	12	5	511	1
	Total	250	100	43,862	100

*(table continues)*

Table 1 (*continued*)

Variable	Participants		Louisiana	
	n	%	N	%
Level of Education				
Less than Bachelor's	0	0	229	1
Bachelor's Degree	206	82	30,596	69
Master's Degree	38	15	8,977	21
Master's +30 hours	3	1.5	3,614	8
Doctorate	3	1.5	446	1
Total	250	100	43,862	100

*Note.* The Louisiana data are from *Annual Financial and Statistical Report* (Louisiana Department of Education, 2008b).

The sample included novice secondary teachers from four of the largest districts in Louisiana. They will be referred to as Parish A, Parish B, Parish C, and Parish D. Parish A was in the northwest part of the state and had 19 secondary schools (Louisiana Department of Education, 2008b). The general population of classroom teachers ( $N=1,240$ ) included 82.6% female and 17.4% male. The racial composition of Parish A included approximately 92.6% Caucasian, 6.7% African-American, .6% Hispanic, and .08% Asian. In terms of levels of education, there were 1.3% with less than a Bachelor's degree, 67.5% with a Bachelor's degree,



21.9% with a Master's degree, 9.1% with a Master's degree plus 30 hours, and .2% with a Doctorate or Specialist degree in education (see Table 2).

Table 2

*Demographic Composition of Parish A*

Variable	Parish		Louisiana	
	n	%	N	%
Gender				
Male	216	17.4	7,678	18
Female	1,024	82.6	36,183	82
Total	1,240	100	43,862	100
<i>(table continues)</i>				

Table 2 (continued)

Variable		Parish		Louisiana	
		n	%	N	%
Race					
	African-American	83	6.7	9,159	24
	Caucasian	1,148	92.6	34,193	74
	Hispanic	8	.62	511	1
	Asian	1	.08	NA	NA
	Native American	0	0	NA	NA
	Total	1,240	100	43,862	100
Level of Education					
	Less than Bachelor's	16	1.3	229	1
	Bachelor's degree	837	67.5	30,596	69
	Master's degree	271	21.9	8,977	21
	Master's +30 hours	113	9.1	3,614	8
	Doctorate or Specialist degree	3	.2	446	1
	Total	1,240	100	43,862	100

*Note.* The data are from *Annual Financial and Statistical Report* (Louisiana Department of Education, 2008b).

Parish B was also located in the northwest part of the state and had 28 secondary schools (Louisiana Department of Education, 2008b). The general population of classroom teachers ( $N=2,826$ ) included 80.8% female and 19.2% male. The racial composition of Parish B included approximately 64.9% Caucasian, 34.1% African-American, .4% Hispanic, .2% Native American, and .4% Asian. With regard to levels of education, there were 1.6% with less than a Bachelor's degree, 65.7% with a Bachelor's degree, 22.1% with a Master's degree, 9.6% with a Master's degree plus 30 hours, and .9% with earned a Doctorate or Specialist degree in education (see Table 3).

Table 3

*Demographic Composition of Parish B*

Variable	Parish		Louisiana	
	n	%	N	%
Gender				
Male	542	19.2	7,678	18
Female	2,284	80.8	36,183	82
Total	2,826	100	43,862	100

*(table continues)*

Table 3 (*continues*)

Variable		Parish		Louisiana	
		n	%	N	%
Race					
	African-American	964	34.1	9,159	24
	Caucasian	1,834	64.9	34,193	74
	Hispanic	12	.4	511	1
	Asian	10	.4	NA	NA
	Native American	6	.2	NA	NA
	Total	2,826	100	43,862	100
Level of Education					
	Less than Bachelor's	46	1.6	229	1
	Bachelor's degree	1,856	66.0	30,596	69
	Master's degree	625	22.0	8,977	21
	Master's +30 hours	271	9.5	3,614	8
	Doctorate or Specialist degree	28	.9	446	1
	Total	2,826	100	43,862	100

*Note.* The data are from *Annual Financial and Statistical Report* (Louisiana Department of Education, 2008b). NA=not available.

Parish C was located in the southwest part of the state and had 25 secondary schools (Louisiana Department of Education, 2008b). The general population of classroom teachers ( $N=2,270$ ) included 84.1% female and 15.9% male. The racial composition of Parish C included approximately 85.3% Caucasian, 14.1% African-American, .4% Hispanic, .04% Native American, and .09% Asian. Less than one percent of the participants (.6%) held less than a Bachelor's degree, 67.4% had earned a Bachelor's degree, 20.8% held a Master's degree, 9.9% had a Master's degree plus 30 hours, and 1.3% had earned a Doctorate or Specialist degree in education (see Table 4).

Table 4

*Demographic Composition of Parish C*

Variable	Parish		Louisiana	
	n	%	N	%
Gender				
Male	362	15.9	7,678	18
Female	1,908	84.1	36,183	82
Total	2,270	100	43,862	100

*(table continues)*

Table 4 (*continues*)

Variable		Parish		Louisiana	
		n	%	N	%
Race					
	African-American	320	14.1	9,159	24
	Caucasian	1,937	85.3	34,193	74
	Hispanic	10	.4	511	1
	Asian	2	.09	NA	NA
	Native American	1	.04	NA	NA
	Total	2,270	100	43,862	100
Level of Education					
	Less than Bachelor's	15	.6	229	1
	Bachelor's degree	1,529	67.4	30,596	69
	Master's degree	472	20.8	8,977	21
	Master's +30 hours	225	9.9	3,614	8
	Doctorate or Specialist degree	29	1.3	446	1
	Total	2,270	100	43,862	100

*Note.* The data are from *Annual Financial and Statistical Report* (Louisiana Department of Education, 2008b).

Parish D was located in the southeast part of the state and had 21 secondary schools (Louisiana Department of Education, 2008b). The general population of classroom teachers ( $N=2,559$ ) included 84.4 % female and 15.6% male. The racial composition of Parish C included approximately 92.1% Caucasian, 6.1% African-American, 1.3% Hispanic, .2% Native American, and .3% Asian. With regard to participants' levels of education, .0% held less than a Bachelor's degree, 59.9% had earned a Bachelor's degree, 30.7% held a Master's degree, 8.1% had a Master's degree plus 30 hours, and 1.3% had earned a Doctorate or Specialist degree in education (see Table 5).

Table 5

*Demographic Composition of Parish D*

Variable	Parish		Louisiana	
	n	%	N	%
Gender				
Male	399	15.6	7,678	18
Female	2,160	84.4	36,183	82
Total	2,559	100	43,862	100

*(table continues)*

Table 5 (*continues*)

Variable		Parish		Louisiana	
		n	%	N	%
Race					
	African-American	157	6.1	9,159	24
	Caucasian	2,356	92.1	34,193	74
	Hispanic	34	1.3	511	1
	Asian	8	.3	NA	NA
	Native American	4	.2	NA	NA
	Total	2,559	100	43,862	100
Level of Education					
	Less than Bachelor's	0	0	229	1
	Bachelor's degree	1,534	59.9	30,596	69
	Master's degree	786	30.7	8,977	21
	Master's +30 hours	206	8.1	3,614	8
	Doctorate or Specialist degree	33	1.3	446	1
	Total	2,559	100	43,862	100

*Note.* The data are from *Annual Financial and Statistical Report* (Louisiana Department of Education, 2008b).



## **Instrumentation**

In educational research, the instrument is a tool used to collect data (Gay & Airasian, 2003). Survey questionnaires are frequently employed to learn about people's behaviors, characteristics, attitudes, and opinions. This research study utilized two existing instruments: *Leader Behavior Description Questionnaire* (LBDQ) Form XII (Stogdill, 1963) and the *Teacher Stress Inventory*, or TSI (Fimian, 1988). The LBDQ, Form XII is made available for research purposes and is published on the Ohio State University, Fisher College of Business Website. The TSI is published by Michael Fimian and is made available to the researcher after registering on his website. Both of the instruments are copyrighted and thus, only brief passages may be quoted for this paper. Permission has been granted to use the LBDQ, Form XII (see Appendix D) and the TSI (see Appendices E and F).

Two parts of the three-part survey questionnaire were from the *Teacher Stress Inventory* (TSI). Part one was comprised of ten items devoted to collecting general demographic and organizational data on the participants. Part two of the survey included 49 questions from the TSI. Part three of the survey questionnaire contained 20 items from the *Leader Behavior Description Questionnaire* (LBDQ), Form XII.

### ***Leadership Behavior Description Questionnaire***

The LBDQ, Form XII evolved from the work of Hemphill (1949). It was observed that several of the leadership dimensions identified by Hemphill could be sorted into two factors that were subsequently labeled by Halpin and Winer as consideration behavior and initiation of structure behavior (Stogdill & Coons, 1957). The current version of the LBDQ, Form XII, is the fourth revision developed in 1960 (Stogdill, 1963). The questionnaire consists of a list of phrases that describe the leadership behavior to be rated (see Table 6).

The participant is directed to rate the leadership behavior on a five-point Likert scale to indicate how frequently their leader engages in the described behavior. The numbers and their choices are: 5= Always, 4=Often, 3= Occasionally, 2= Seldom, and 1=Never (Stogdill).

Table 6

*LBDQ, Form XII Sample Questionnaire Items*

Leadership Behavior	Sample Questionnaire Item
Initiation of Structure	Lets group members know what is expected of them
	Decides what shall be done and how it shall be done
	Schedules the work to be done
Consideration	Does little things to make it pleasant to be a member of the group
	Looks out for the personal welfare of group members
	Is friendly and approachable

*Note.* From the *Leadership Behavior Description Questionnaire, Form XII*, Stogdill, 1963.

Reliability of an instrument refers to the ability to yield consistent results (Rudestam & Newton, 2001). A common estimate of internal consistency reliability is the Kuder-Richardson

equation (Fraenkel & Wallen, 2000). Internal consistency reliability for the LBDQ, Form XII was determined by a modified Kuder-Richardson equation (Stogdill, 1963). The modification correlated each item with the remainder of the items in its subscale rather than with the subscale score including the item. This yielded a conservative estimate of the subscale reliability for the LBDQ, Form XII. The reliability coefficient for consideration leadership behavior was .87. The reliability coefficient for initiating structure leadership behavior was .80. Reliability estimates for research should be at least .70 or higher (Fraenkel & Wallen).

Validity is important to all research and is concerned with the appropriateness of the instrument (Gay & Airasian, 2003). Multiple validation tests were utilized by the authors of the LBDQ, Form XII to verify construct validity. Halpin and Winer (1957) reported that the validity for the most current version was based on a between-group versus within-group analysis of variance yielded significant *F* ratios at the .01 level. The items were administered to successive groups and after item analysis, the questionnaires were revised, administered again, reanalyzed, and revised (Stogdill, 1963). Thus, the current version (Form XII) represents the fourth revision.

### ***Teacher Stress Inventory***

The TSI was authored by Michael Fimian in an effort to quantify the stress that is specific to teaching (Fimian & Fastenau, 1990). Based upon aggregated data from 21 different samples of teachers, five sources of stress and five manifestations of stress were identified. The TSI consists of 49 teacher-specific concerns to be rated on a Likert-type rating scale (see Table 7). The directions specify that the participant indicate how strong the feeling is by ranking according to a scale from one to five. One indicates that the feeling is not noticeable, and five indicates that the feeling is extremely noticeable (Fimian & Fastenau, 1990). The ten sub-scores are averaged to calculate one composite score. The questions are followed by a brief demographic section to collect information on sex, age, race, and marital status of the respondents. With permission from

the author (Fimian, 1988), information was also collected on the certification path, educational level of the participants. Organizational information was also reported, including grade level assignment, subject(s) taught, and total number of students.

Table 7

*TSI Subscales and Sample Items*

Subscale	Sample Questionnaire Item
Sources of Stress	
Time Management	There is not enough time to get things done.
Work-related Stressors	My class load is too big.
Professional Distress	I lack recognition for the extra work I do.
Discipline and Motivation	I feel frustrated because of the discipline problems in my classroom.
Professional Investment	I lack the opportunities for professional improvement.
Manifestations of Stress	
Emotional Manifestations	I respond to stress by feeling anxious.
Fatigue Manifestations	I respond to stress by procrastinating.
Cardiovascular Manifestations	I respond to stress with heart pounding or racing.
Gastronomical Manifestations	I respond to stress with stomach pain.
Behavioral Manifestations	I respond to stress by calling in sick.

*Note:* From the *Teacher Stress Inventory*, Fimian, 1988.

Internal consistency reliability evaluates the degree to which the subscales of an instrument measure the same thing (Huck, 2004). Cronbach's alpha is a common measure of internal consistency reliability. Values for Cronbach's alpha can range between 0 and 1.0. Values closer to 1.0 indicate higher reliability (Hair, Anderson, Tatham, & Black, 1995). The Cronbach's alpha for the TSI was .93 (Fimian & Fastenau, 1990). Thus, the coefficient alpha suggests that the items in the TSI are internally consistent.

Factor analysis examines a number of interrelated factors simultaneously (Leedy & Ormrod, 2005). Additionally, factor analysis allows the identification of distinct dimensions of the construct. The factor analysis can then establish the extent to which the construct is explained by each dimension (Hair, Anderson, Tatham, & Black, 1995). The earliest work on stress identification measured 49 stress-related items (Fimian, 1984, 1985). Factors can be translated to extract more meaningful factor clusters (Hair et al., 1995). Preliminary factor analyses were conducted by the author of the TSI and then followed by oblique and varimax rotations to analyze the interrelationship of the items. The relationships among these factors were then examined by Fimian (1988) using the Pearson product-moment correlational analyses. Ten factors were retained that had factor loadings of .35 or greater, loaded clearly on only one factor and did not reduce the scale/subscale internal consistency reliability (Fimian & Fastenau, 1990). The internal consistency reliability estimates were examined utilizing Cronbach's coefficient alpha .75 to .88 (Fimian & Fastenau). The total scale alpha reliability estimate was .93. Test-retest reliability scores were highly acceptable, ranging from .81 to .99 across the subscales (Fimian, 1985). Thus, the coefficient alpha suggests that the TSI subscales are reliable dimensions to explain teacher stress.

Validity examines the predictive value of the instrument (Huck, 2004). The TSI demonstrates high criterion-related validity. The validity correlation coefficients ranged from .90 to .95 (Fimian, 1988). Thus, the predictive validity of the TSI was statistically supported.

### **Procedures**

The Institutional Review Board of the University of New Orleans (UNO) has articulated rigorous guidelines to protect research participants. These guidelines align with the National Institutes of Health. The Human Participants Protection Education for Research Teams online course was completed for certification (see Appendix E). Initial permission was granted by the dissertation committee and an application was filed with the UNO Institutional Review Board. This study was granted expedited review because it met the established criteria in the Federal Code, 45 CFR 46.101b and category 2, and subsequently approved (see Appendix F).

The personnel office in each Louisiana public school district had a primary contact for the Louisiana Teacher Assistance and Assessment (LATAAP) program. The superintendents of the ten largest parishes in Louisiana were contacted with a request for permission to contact the district's LATAAP coordinator (see Appendix G). Four parish superintendents responded affirmatively. The LATAAP coordinator was then petitioned to electronically forward an email request to participate to all novice secondary teachers (see Appendix H). In an effort to encourage participation, a drawing for a gift card was offered as an incentive. Teachers wishing to enter the drawing included their email address on the final survey question. This item was optional and not required for participation.

The email to novice secondary teachers requested that they complete the three-part online survey. Part one of the survey, from the TSI, collected demographic and organizational information describing the sample. The second part included twenty items from the *Leader*

*Behavior Description Questionnaire, Form XII* (Stogdill, 1963) utilized to determine the novice secondary teacher's perceptions of principal leadership in two dimensions. The third part of the survey utilized the *Teacher Stress Inventory* (1988) to determine a composite stress score along ten components.

SurveyMonkey<sup>TM</sup> online software was utilized to administer the survey.

SurveyMonkey<sup>TM</sup> is survey software that permits the researcher to create professional online surveys quickly and easily. After loading the survey, a link was generated for inclusion in the email invitation to the novice secondary teachers. Participation in the online questionnaire was completely voluntary, and all responses were treated with appropriate confidentiality. The Internet Protocol (IP) address is a numerical identification assigned to computers in a network. SurveyMonkey<sup>TM</sup> provided the researcher the opportunity to deselect the participants' IP address. Thus, identifying email addresses were not recorded through the data collection. The online service collected the raw data for analysis with the *Statistical Package for the Social Science Version 16.0* (SPSS).

### **Data Analysis**

This study attempted to determine if a relationship existed between the quantified variables (Gay & Airasian, 2003). This relationship study employed a multiple regression design in the analysis of the data for the first research question because several variables were considered (Gay & Airasian, 2003). Additionally, regression analysis estimates the strength of the relationship (Hair et al., 1995). Stepwise regression was used to determine the relationship of novice secondary teacher stress and the perception of secondary principal leadership. The independent variables, or predictor variables, were stress subscales for the novice secondary teacher. Stress was operationally defined along ten subscales, five sources of stress and five



manifestations of stress. The dependent variable, or criterion variable, was the perception of principal leadership behavior. Leadership behavior was operationally defined over two quantified dimensions, initiating structure behavior and consideration behavior.

Stepwise multiple regression was utilized to generate models that identified the most significant predictor or set of predictors. A stepwise multiple regression in this study offered the most efficient set of predictor variables regarding sources of stress and manifestations of stress. The SPSS program rank ordered the independent variables and generated two models (Hair, Anderson, Tatham, & Black, 1995). Model 1 identified the single most significant predictor variable. Model 2 identified the most significant combination of predictor variables.

### ***Research Question 1***

The renewed emphasis on highly qualified teachers, embedded within NCLB, stresses the importance of principal leadership to the recruitment and retention of teachers. Thus, the guiding question for this proposal: Is there an empirical relationship between perceived secondary principal leadership behavior and stress experienced by novice secondary school teachers? Four hypotheses included the following:

Hypothesis 1: Sources of stress for novice secondary teachers will significantly predict the perception of initiating structure leadership behavior of their principal.

Hypothesis 2: Sources of stress for novice secondary teachers will significantly predict the perception of consideration leadership behavior of their principal.

Hypothesis 3: Manifestations of stress for novice secondary teachers will significantly predict the perception of initiating structure leadership behavior of their principal.

Hypothesis 4: Manifestations of stress for novice secondary teachers will significantly predict the perception of consideration leadership behavior of their principal.

### *Data Analysis*

Data for the first four hypotheses were gathered from parts two and three of the online survey. Hypotheses 1-4 utilized a stepwise multiple regression to determine the most efficient set of predictor variables for perceptions of principal leadership behavior.

### ***Research Question 2***

An additional consideration for this study was the influence of the demographic variables on the total stress score for novice secondary teacher. Demographic variables are those over which the participant has no control (Gay & Airasian, 2003). The demographic variables for the novice secondary teachers included: gender, age group, race, marital status, level of education, semesters of experience, and certification path. Thus, a second broad research question: Is there a relationship between the demographic characteristics associated with novice secondary teachers and the stress they experience?

Hypothesis 5: Total stress scores for novice secondary teachers will differ across demographic variables.

### *Data Analysis*

Data for the demographic variables were gathered from part one, questions 1-7 of the online survey. One-way analysis of variance (ANOVA) provided data on demographic variables and the total stress in novice secondary teachers. One-way ANOVA determines if differences exist across groups on mean stress scores. The specific demographic variable selected served as the independent variable, and the total stress score of the novice secondary teacher was the dependent variable. A conservative alpha of .01 was set to minimize the probability of a Type I error.

### ***Research Question 3***

The third consideration for this study was the influence of the organizational variables on the total stress in the novice secondary teacher. Organizational variables are controlled or assigned to the novice secondary teacher as part of the principal's administrative duties. The organizational variables included grade taught and subject taught. Thus, the third broad question: Is there a relationship between the organizational variables associated with the novice secondary teacher and the stress experienced by that teacher?

Hypothesis 6: Total stress scores for novice secondary teachers will differ across organizational variables.

### ***Data Analysis***

Data for the organizational variables were gathered from part one, questions 8-10 of the online survey. One-way analysis of variance (ANOVA) provided data on organizational variables and the total stress in novice secondary teachers. One-way ANOVA determines if differences exist across groups on mean stress scores. The specific organizational variable selected served as the independent variable, and the total stress score of the novice secondary teacher was the dependent variable. A conservative alpha of .01 was set to minimize the probability of a Type I error.

### **Summary**

The primary purpose of this quantitative study was to determine if a significant relationship existed between the perceived leadership behavior of secondary principals and stress in novice secondary teachers. The methodology described in this chapter provided the framework for investigating the research question. The design of this relationship study included the online administration of a three-part survey questionnaire. The purposive sample for this

study consisted of all novice secondary teachers that respond to the self-administered survey.

The sample closely resembled the Louisiana population of teachers in gender, race, and level of education.

The statistical analyses utilized included stepwise multiple regressions and one-way ANOVA. A stepwise multiple regression analysis was used to generate the most efficient set of predictor variables (sources of stress and manifestations of stress) regarding the perception of leadership behavior. One-way ANOVA was applied to explore the relationship between categorical independent variables (e.g., gender and race) and metric dependent variables (e.g., total stress score). Hence, a one-way ANOVA was used to evaluate the differences in the stress of novice secondary teachers across demographic and organizational variables.

Research has linked the teacher's perceptions of principal leadership to teacher retention (Fiore & Whitaker, 2005; Leithwood, Jantzi, & Steinbach, 2002). Supportive principal leadership has been associated with satisfaction and retention of the teacher, while the cumulative effect of stress has been associated with dissatisfaction and teacher turnover (e.g., Betancourt-Smith, Inman, & Marlow, 1994; Hirsch, 2005, 2006; Ingersoll, 2001, 2003). An empirical examination of the relationship between perceived principal leadership and stress in the novice teacher may provide insight into retention and recruitment strategies and programs of principal leadership preparation and practice.

## CHAPTER FOUR

### Introduction

The primary purpose of this study was to determine if a significant relationship existed between the perceived leadership behavior of secondary principals and stress in novice secondary teachers. The continued emphasis on the highly qualified teacher frames the context for modern principal leadership. The recruitment and retention of capable teachers are major functions of effective principal leadership. Thus, a primary implication for this study is improved leadership practices and the licensure and training of secondary principals.

The *Statistical Package for Social Science Version 16.0* (SPSS) software was used to calculate frequencies, percentages, means, and standard deviations related to the respondents and the 69 questionnaire items. The Pearson's  $r$  was used to determine correlation between the sources and manifestations of stress for the novice secondary teacher. A stepwise multiple regression was utilized to determine the strength of the relationship between stress for the novice secondary teacher and the perception of principal leadership behavior. A one-way ANOVA was used to compare means and provide information relative to the categorical variables that described the sample.

Chapter Four includes the results of the analyses, organized in four sections. An outline of the chapter organization is detailed in the first section followed by a description of the parishes sampled. The statistical analyses of data are then presented with each research question and associated hypotheses. The chapter concludes with a summary of the results.

## Research Questions

The primary purpose of this quantitative study was to determine if a relationship exists between the perceived leadership behavior of secondary school principals and stress in novice secondary teachers. Perceptions of principal leadership were quantified in this study along two variable dimensions: initiating structure behavior and consideration behavior. Teacher stress was operationally defined across ten subscales that identify five sources of stress and five manifestations of stress.

### *Research Question 1*

The renewed emphasis on highly qualified teachers highlights the importance of principal leadership to the recruitment and retention of teachers. Thus, the guiding question was: Is there a relationship between perceived secondary principal leadership behavior and stress experienced by novice secondary school teachers? The three-part survey included 69 questions affiliated with two broad constructs: teacher stress and perceived leadership behavior.

Perceived principal leadership behavior was composed of two subscale dimensions: initiating structure behavior and consideration behavior. Twenty questions from the *Leader Behavior Description Questionnaire* Form XII, Short Form (Stogdill, 1963), were associated with the perceived leadership behavior. Ten questions were linked with initiating structure behavior, and 10 questions were linked with consideration behavior. Each item was scored by the respondent on a Likert-type rating scale, where 1=never and 5=always. The subscale score was calculated by adding the novice secondary teacher's responses to the 10 questions associated with each type of leadership behavior. Scores ranged from 10 to 50, with 50 indicating the strongest rating of leadership behavior. Consideration leadership behavior was found to have a higher mean stress score ( $M=23.31$ ,  $SD=8.91$ ) than initiating structure (see Table 8).

Consideration leadership behavior was relationship-driven and concerned with the well-being of

others (Stodgill, 1963). The results suggested that novice secondary teachers were more likely to regard their principals' leadership behaviors as attentive.

Table 8

*Mean Subscale Scores and Standard Deviations for Perceived Principal Leadership Behavior on the LBDQ, Form XII, Subscales*

Perceived Leadership Behavior Subscale	<i>M</i>	<i>SD</i>
Initiating Structure	19.30	7.53
Consideration	23.31	8.91

*Note.* N=250. Leadership behavior subscale range is 10-50.

The construct of teacher stress was quantified using scores from the *Teacher Stress Inventory* (Fimian, 1988). Teacher stress was composed of two general subscale categories, sources of stress and manifestations of stress. Twenty-nine questions were associated with five sources of stress for the novice secondary teacher. Twenty questions were associated with five manifestations of stress for the novice secondary teacher. The sources of stress included five subscale scores: time management, work-related stressors, professional distress, discipline and motivation, and professional investment. The manifestations of stress included emotional manifestation, fatigue manifestation, cardiovascular manifestation, gastronomical manifestation, and behavioral manifestation. Each item was scored by the respondent on a Likert-type rating

scale, where 1=never feel this way and 5=the feeling is extremely noticeable. The 10 subscale scores were each calculated as an average of the specified number of questions.

Descriptive statistics were used to report the results of the survey by subscales (see Table 9). Subscale scores can range from 1 to 5, with 5 indicating the source of stress or the manifestation of stress to be extremely noticeable. In the present study, time management had the highest mean score as a sources of stress ( $M=3.15$ ,  $SD=.70$ ). The time management subscale score measures the strength of the stressor regarding time demands on the novice secondary teacher. Additionally, in the present study, fatigue manifestation had the highest mean score of the manifestations of stress ( $M=2.02$ ,  $SD=.85$ ). Fatigue manifestation measures the strength of the manifestation regarding physical exhaustion and weariness in the novice secondary teacher. These results suggested time management was a common source of stress for novice secondary teachers, and physical fatigue was a common manifestation of stress.



Table 9

*Mean Subscale Stress Scores and Standard Deviations for Novice Secondary Teachers on Sources and Manifestations of Stress on TSI*

Subscale	<i>M</i>	<i>SD</i>
Subscales: Source of Stress		
Time Management	3.15	.70
Work-related Stressors	2.81	.94
Professional Distress	2.22	.87
Discipline and Motivation	3.09	1.01
Professional Investment	1.86	.77
Subscales: Manifestation of Stress		
Emotional Manifestation	1.93	.86
Fatigue Manifestation	2.02	.85
Cardiovascular Manifestation	1.69	.86
Gastronomical Manifestation	1.46	.84
Behavioral Manifestation	1.29	.56

*Note.* N=250. Stress subscale score range is 1-5.

A Pearson product-moment correlation coefficient,  $r$ , was employed to assess the relationship between the predictor variables: sources of stress and manifestations of stress. The Pearson  $r$  results for sources of stress were all positive (see Table 10). The matrix illustrates that

correlation among the five sources of stress is significant at  $p<.01$  level. Results of the analyses indicate professional investment and professional distress are the most strongly correlated ( $r=.70$ ). Time management and work-related stressors are also strongly correlated ( $r=.64$ ). These results suggested that the sources of stress subscales were reliable indicators of teacher stress.

Table 10

*Pearson  $r$  for Sources of Stress Subscales on the Teacher Stress Inventory*

Subscales	Time Management	Work-related Stressors	Professional Distress	Discipline and Motivation	Professional Investment
Time Management	-				
Work-related Stressors	.64	-			
Professional Distress	.42	.56	-		
Discipline and Motivation	.35	.51	.49	-	
Professional Investment	.38	.48	.70	.58	-

*Note.* N=250.  $p<.01$ .

A Pearson  $r$  was employed to assess the relationship between the predictor variables. The Pearson  $r$  results for manifestations of stress are found in Table 11. The matrix illustrates correlation among the five subscales is significant at  $p<.01$  level. Fatigue manifestations and emotional manifestations are the most strongly correlated ( $r=.71$ ). Cardiovascular manifestations

and gastronomical manifestations are also strongly correlated ( $r=.57$ ). These results suggested that the manifestations of stress subscales were reliable indicators of teacher stress.

Table 11

*Pearson  $r$  for Manifestations of Stress Subscales on the Teacher Stress Inventory*

Subscales	Emotional	Fatigue	Cardiovascular	Gastronomical	Behavioral
Emotional	-				
Fatigue	.71	-			
Cardiovascular	.51	.48	-		
Gastronomical	.40	.46	.57	-	
Behavioral	.46	.50	.52	.53	-

*Note.* N=250.  $p<.01$ .

### ***Test of Hypothesis 1***

Hypothesis 1: Sources of stress for novice secondary teachers will significantly predict the perception of initiating structure leadership behavior of their principal.

Stepwise multiple regression was utilized to determine if sources of stress were predictive of perceived initiating structure leadership behavior. The five predictor variables were the

sources of stress for novice secondary teachers: time management, work-related stressors, professional distress, discipline and motivation, and professional investment. The dependent variable was the perception of initiating structure leadership behavior of the principal. Stepwise multiple regression generated two models of predictor variables. In the first model, the single most significant predictor was identified. The second model presented the best set of predictor variables. The stepwise regression indicated both models were significant predictors of initiating structure leadership behavior (see Table 12). Model 1 identified professional investment as the strongest predictor of leadership behavior as initiating structure. Model 2 generated the most efficient combination of predictors to include professional investment and professional distress. Similarly,  $F$  ratios indicated that both model 1 ( $F(1, 249) = 98.927, p < .001$ ) and model 2 ( $F(2, 248) = 58.820, p < .001$ ) represented linear models. Therefore, the models efficiently predicted initiating structure leadership.

The stepwise regression generated  $R^2 = .285$  ( $p < .001$ ) and  $R^2 = .300$  ( $p < .001$ ) for models 1 and 2 respectively. These results indicate that model 1 accounted for 28.5% of the sample variation in initiating structure leadership behavior, as predicted by the professional investment. Model 2 accounted for 30.0% of the sample variation in initiating structure leadership behavior, as predicted by professional investment and time management. A decrease in the Standard Error of the Estimate ( $SEE$ ) from model 1 to model 2 indicated that model 2 offered a more precise prediction equation. These results suggested initiating structure leadership behavior can be predicted from sources of stress in the novice secondary teacher.

Table 12

*Stepwise Regression: Sources of Stress for Novice Secondary Teachers as Predictors of Perceived Initiating Structure Leadership Behavior*

Model		df	F	R	R <sup>2</sup>	$\Delta R^2$	SEE	B	95% CI	
									Lower Bound	Upper Bound
1	Constant							9.589	7.508	11.670
	Professional Investment	1	98.927*	.534	.285	.285	6.38	5.220	4.187	6.254
2	Constant							13.084	9.398	16.769
	Professional Investment							5.703	4.594	6.811
	Time Management	2	58.820*	.547	.300	.014	6.32	-1.394	-2.612	-.176

Note. N=250. \* $p < .001$ .

### ***Test of Hypothesis 2***

Hypothesis 2: Sources of stress for novice secondary teachers will significantly predict the perception of consideration leadership behavior of their principal.

Stepwise multiple regression generated two models of predictor variables. In the first model, the single most significant predictor was identified. The second model presented the best set of predictor variables. In the first model, the single most significant predictor was identified. The second model presented the best set of predictor variables. The stepwise regression indicated both models were significant predictors of consideration leadership behavior (see Table 13). Model 1 offered professional investment as the strongest predictor of leadership behavior as consideration. Model 2 generated the most efficient combination of predictors to include professional investment and professional distress. Similarly,  $F$  ratios indicated that both model 1 ( $F(1, 249) = 98.461$ ),  $p < .001$ ) and model 2 ( $F(2, 248) = 59.061$ ),  $p < .001$ ) represent linear models. Therefore, the models efficiently predicted consideration leadership.

The stepwise regression generated  $R^2 = .284$  ( $p < .001$ ) and  $R^2 = .324$  ( $p < .001$ ) for models 1 and 2 respectively. These results indicated that model 1 accounted for 28.4% of the sample variation in consideration leadership behavior as predicted by the professional investment. Model 2 accounted for 32.4% of the sample variation in consideration leadership behavior as predicted by professional investment and time management. A decrease in the Standard Error of the Estimate ( $SEE$ ) from model 1 to model 2 indicated that model 2 offered a more precise prediction equation. These results suggested consideration leadership behavior can be predicted from sources of stress in the novice secondary teacher.

Table 13

*Stepwise Regression: Sources of Stress for Novice Secondary Teachers as Predictors of Perceived Consideration  
Leadership Behavior*

Model		df	F	R	R <sup>2</sup>	$\Delta R^2$	SEE	B	95% CI	
									Lower Bound	Upper Bound
1	Constant							9.589	9.360	14.292
	Professional Investment	1	98.461*	.533	.284	.284	7.55	5.220	4.945	7.394
2	Constant							9.722	7.083	12.362
	Professional Investment							3.943	2.281	5.605
	Professional Distress	2	59.061*	.569	.324	.039	7.36	2.814	1.351	4.277

Note. N=250. \* $p < .001$

### ***Test of Hypothesis 3***

Hypothesis 3: Manifestations of stress for novice secondary teachers will significantly predict the perception of initiating structure leadership behavior of their principal.

Stepwise multiple regression generated two models of predictor variables. In the first model, the single most significant predictor was identified. The second model presented the best set of predictor variables. The stepwise regression indicated both models were significant predictors of initiating structure leadership behavior (see Table 14). Model 1 offered emotional manifestation as the strongest predictor of initiating structure leadership behavior. Model 2 generated the most efficient combination of predictors to include emotional manifestation and behavioral manifestation. Similarly,  $F$  ratios indicated that both model 1 ( $F(1, 249) = 17.607$ ,  $p < .001$ ) and model 2 ( $F(2, 248) = 11.757$ ,  $p < .001$ ) represented linear models. Additionally, a decrease in the Standard Error of the Estimate ( $SEE$ ) from model 1 to model 2 indicated that model 2 offered a more precise prediction equation. Therefore, both models efficiently predicted initiating structure leadership.

The stepwise regression generated  $R^2 = .066$  ( $p < .001$ ) and  $R^2 = .087$  ( $p < .05$ ) for models 1 and 2 respectively. These results indicate that model 1 accounted for only 6.6% of the sample variation in initiating structure leadership behavior as predicted by the professional investment. Model 2 accounted for 8.7% of the sample variation in initiating structure leadership behavior as predicted by emotional manifestation and behavioral manifestation. However, the low coefficients of determination ( $R^2$ ) indicated a possible reluctance on the part of the participants to disclose the personal information addressed in the survey questions.



Table 14

*Stepwise Regression: Manifestations of Stress for Novice Secondary Teachers as Predictors of Perceived Initiating Structure Leadership Behavior*

Model		<i>df</i>	<i>F</i>	<i>R</i>	<i>R</i> <sup>2</sup>	$\Delta R^2$	<i>SEE</i>	<i>B</i>	95% <i>CI</i>	
									<i>Lower Bound</i>	<i>Upper Bound</i>
1	Constant							14.964	12.734	17.194
	Emotional Manifestation	1	17.607*	.257	.066	.066	7.29	2.249	1.193	3.305
	Behavioral Manifestation	1	17.607*	.257	.066	.066	7.29	2.249	1.193	3.305
2	Constant							13.389	10.818	15.960
	Emotional Manifestation							1.604	.427	2.780
	Behavioral Manifestation	2	11.757*	.295	.087	.021	7.22	2.182	.363	4.001

*Note.* N=250. \**p*<.001.

#### ***Test of Hypothesis 4***

Hypothesis 4: Manifestations of stress for novice secondary teachers will significantly predict the perception of consideration leadership behavior of their principal.

Stepwise multiple regression generated two models of predictor variables. In the first model, the single most significant predictor was identified. The second model presented the best set of predictor variables. The stepwise regression indicated both models were significant predictors of leadership behavior (see Table 15). Model 1 offered emotional manifestation as the strongest predictor of initiating structure leadership behavior. Model 2 generated the most efficient combination of predictors to include emotional manifestation and gastronomical manifestation. Similarly,  $F$  ratios indicated that both model 1 ( $F(1, 249) = 13.609, p < .001$ ) and model 2 ( $F(2, 248) = 9.510, p < .001$ ) represented linear models. Additionally, a decrease in the Standard Error of the Estimate ( $SEE$ ) from model 1 to model 2 indicated that model 2 offered a more precise prediction equation. Therefore, both models efficiently predicted initiating structure leadership.

The stepwise regression generated  $R^2 = .052$  ( $p < .001$ ) and  $R^2 = .072$  ( $p < .001$ ) for models 1 and 2 respectively. These results indicated that model 1 accounted for only 5.2% of the sample variation consideration leadership behavior as predicted by the professional investment. Model 2 accounted for 7.2% of the sample variation in initiating structure leadership behavior as predicted by emotional manifestation and behavioral manifestation. However, the low coefficients of determination ( $R^2$ ) indicated participants' possible reluctance to disclose the personal information in response to the survey questions.

Table 15

*Stepwise Regression: Manifestations of Stress for Novice Secondary Teachers as Predictors of Perceived Consideration Leadership Behavior*

Model		<i>df</i>	<i>F</i>	<i>R</i>	<i>R</i> <sup>2</sup>	$\Delta R^2$	<i>SEE</i>	<i>B</i>	95% <i>CI</i>	
									<i>Lower Bound</i>	<i>Upper Bound</i>
Constant								18.756	16.096	21.417
1	Emotional Manifestation	1	13.609*	.228	.052	.052	8.69	2.359	1.099	3.618
Constant								17.622	14.806	20.437
Emotional Manifestation								1.725	.361	3.089
2	Gastronomical Manifestation	2	9.510*	.267	.072	.019	8.62	1.612	.217	3.006

Note. N=250. \* $p < .001$

### *Research Question 2*

An additional consideration for this study was the influence of the demographic variables and stress in the novice secondary teacher. Demographic variables are those over which the participant has no control (Gay & Airasian, 2003). The demographic variables for the novice secondary teachers included: gender, age, race, marital status, level of education, semesters of experience, and certification path. A one-way ANOVA was applied to compare the total stress scores of the novice secondary teachers by demographic variables. The statistical analyses indicated that the research hypothesis was rejected for each of the demographic variables.

The means and standard deviations are presented for each of several demographic variables, including gender, age, race, marital status, level of education, and semesters of experience (Table 16). The mean stress score was slightly higher for females ( $M=2.16$ ,  $SD=.59$ ). A one-way ANOVA was applied to race using two categories: white and non-white. Three categories were combined because of low responses in the Native American, Asian, and Hispanic categories. White novice teachers had a higher mean stress score ( $M=2.18$ ,  $SD=.54$ ). The total stress scores in novice teachers were tightly clustered with regard to age. The youngest novice teachers, age 22-24, had the highest mean stress score ( $M=2.24$ ,  $SD=.50$ ). Single, never married novice teachers had the highest mean stress score ( $M=2.18$ ,  $SD=.60$ ). A one-way ANOVA was applied to level of education using two categories: Bachelor's degree and Master's degree or higher. Categories were combined for the level of education because of low responses: Master's +30 hours and Doctorate were collapsed into the Master's degree or higher. The Master's or above group had the higher mean stress score ( $M=2.24$ ,  $SD=.64$ ). Of the three indicators for certification path (e.g., highly qualified, OFAT or out-of-field teaching, and

alternative certification) the novice teachers working out of their field of certification (OFAT) had the highest mean stress score ( $M=2.20$ ,  $SD= .63$ ).

Table 16

*Mean Total Stress Scores and Standard Deviations for Novice Secondary Teachers by Demographic Variables on the Teacher Stress Inventory*

Demographic Variable	<i>M</i>	<i>SD</i>	<i>n</i>
Gender			
Male	2.05	.57	27
Female	2.16	.59	223
Total	2.15	.58	250
Race			
White	2.18	.54	212
Non-white	2.01	.80	38
Total	2.15	.58	250

*(table continues)*

Table 16 (*continued*)

Demographic Variable		<i>M</i>	<i>SD</i>	<i>n</i>
Age				
	22-24	2.24	.50	65
	25-27	2.14	.57	47
	28-30	2.17	.51	36
	31-33	2.07	.59	26
	34-36	2.19	.66	17
	37-39	1.94	.50	13
	40-45	2.21	.94	17
	46-50	2.22	.54	13
	50+	1.90	.61	16
	Total	2.15	.58	250
Marital Status				
	Single, never married	2.18	.60	66
	Single, divorced	2.10	.53	24
	Single, widowed	1.92	.24	2
	Married-in a committee relationship	2.15	.59	158
	Total	2.15	.58	250

*(table continues)*

Table 16 (*continued*)

Demographic Variable		<i>M</i>	<i>SD</i>	<i>n</i>
Level of Education	Bachelor's degree	2.13	.57	206
	Master's degree or higher	2.24	.64	44
	Total	2.15	.58	250
Semesters of Experience	1	2.26	.82	19
	2	2.09	.55	86
	3	2.19	.53	24
	4	2.15	.55	71
	5	2.41	.54	17
	6	2.07	.64	33
	Total	2.15	.58	250

(*table continues*)



Table 16 (*continued*)

Demographic Variable		<i>M</i>	<i>SD</i>	<i>n</i>
Certification Path	Highly qualified	2.17	.57	144
	OFAT	2.20	.63	11
	Alternative Certification	2.13	.60	95
	Total	2.15	.58	250

*Note:* Total stress scale range is 1-5.

### ***Test of Hypothesis 5***

Hypothesis 5: Total stress scores for novice secondary teachers will differ across demographic variables.

#### ***Gender***

A one-way ANOVA was utilized to compare mean stress scores of the sample by gender. The categorical variable was coded 1=male and 2=female. The one-way ANOVA indicated that the research hypothesis was rejected. The results of the ANOVA indicated no significant difference in the total stress score of the novice secondary teacher by gender ( $F(1, 249) = .905, p > .01$ ) (see Table 17).

### *Race*

A one-way ANOVA was utilized to compare mean stress scores of the sample by race. Three categories received a low response rate: Asian, Hispanic, and Native American. Thus, the categories were collapsed into one that was labeled non-white. The variables were coded 1=white and 2=non-white. The one-way ANOVA indicated that the research hypothesis was rejected. The results of the ANOVA indicated no significant difference in the total stress score of the novice secondary teacher by race ( $F(1, 249) = 2.541, p > .01$ ).

### *Age*

A one-way ANOVA was utilized to compare mean stress scores of the sample by age. Nine categories by age group were assigned a code: 1=age 22-24, 2=age 25-27, 3=age 28-30, 4=age 31-33, 5=age 34-36, 6=age 37-39, 7=age 40-45, 8=age 46-50, and 9=age 50 and above. The one-way ANOVA indicated that the research hypothesis was rejected. The results of the ANOVA indicated no significant difference in the total stress score of the novice secondary teacher by age ( $F(8, 242) = .894, p > .01$ ).

### *Marital Status*

A one-way ANOVA was utilized to compare mean stress scores of the sample by marital status. The four categories were assigned a code: 1=single and never married, 2=single and divorced, 3=single and widowed, and 4=married or in a committed relationship. The one-way ANOVA indicated that the research hypothesis was rejected. The results of the ANOVA indicated no significant difference in the total stress score of the novice secondary teacher by marital status ( $F(3, 247) = .201, p > .01$ ).

### *Level of Education*

A one-way ANOVA was utilized to compare mean stress scores of the sample by level of education. Two categories received low responses: Master's +30 hours and Doctorate. The categories were combined into one category with those that had earned a Master's degree. Thus, two categories were coded for the analysis: Bachelor's degree and Master's degree or higher. Codes were assigned to the two groups: 1=Bachelor's degree and 2=Master's degree or higher. The one-way ANOVA indicated that the research hypothesis was rejected. The results of the ANOVA indicated no significant difference in the total stress score of the novice secondary teacher by level of education ( $F(1, 249) = 1.217, p > .01$ )

### *Semesters of Teaching Experience*

A one-way ANOVA was utilized to compare mean stress scores of the sample by semesters of teaching experience. The four categories were assigned a code: 1=one semester of experience, 2=two semesters, 3=three semesters, 4=four semesters, 5=five semesters, and 6=six semesters. The one-way ANOVA indicated that the research hypothesis was rejected. The results of the ANOVA indicate no significant difference in the total stress score of the novice secondary teacher by teaching experience ( $F(5, 245) = 1.394, p > .05$ ).

### *Certification Path*

A one-way ANOVA was utilized to compare mean stress scores of the sample by certification path. Three categories were coded: 1=highly qualified and certified, 2=teaching out-of-field (OFAT) and 3=alternative certification. The one-way ANOVA indicated that the research hypothesis was rejected. The results of the ANOVA indicate no significant difference in the total stress score of the novice secondary teacher by certification path ( $F(2, 248) = .166, p > .01$ ).

Table 17

*One-way Analyses of Variance for Effects of Demographic Variables on Total Stress*

*Scores of Novice Secondary Teachers*

Variable and Source		SS	df	MS	F	p
Gender	Between Groups	.309	1	.309	.905	.342
	Within Groups	84.537	249	.341		
	Total	84.846	250			
Race	Between Groups	.861	1	.861	2.541	.112
	Within Groups	83.985	249	.339		
	Total	84.846	250			

*(table continues)*

Table 17 (continued)

Variable and Source		SS	df	MS	F	p
Age	Between Groups	2.445	8	.306	.894	.522
	Within Groups	82.401	242	.342		
	Total	84.846	250			
Marital Status	Between Groups	.208	3	.069	.201	.896
	Within Groups	84.638	247	.344		
	Total	84.846	250			
Level of Education	Between Groups	.414	1	.414	1.217	.271
	Within Groups	84.432	249	.340		
	Total	84.846	250			
Semesters of Experience	Between Groups	2.823	5	.470	1.394	.218
	Within Groups	82.023	245	.338		
	Total	84.846	250			

(table continues)

Table 17 (*continued*)

Variable and Source	SS	<i>df</i>	<i>MS</i>	<i>F</i>	<i>p</i>
Certification Path					
Between Groups	.114	2	.057	.166	.848
Within Groups	84.732	248	.343		
Total	84.846	250			

### ***Research Question 3***

The third consideration for this study was the influence of the organizational variables on the total stress in the novice secondary teacher. Organizational variables are controlled and assigned to the novice secondary teacher as part of the principal's administrative duties. The organizational variables included grade taught and subject taught. A one-way ANOVA was applied to compare the total stress scores of the novice secondary teachers by organizational variables. The statistical measures indicate the research hypothesis was rejected for each of the organizational variables.

The mean stress scores and standard deviations are presented for each of the organizational variables (see Table 18). Grade 11 and grade 12 were combined into one category because of the low response rate. The mean stress score was slightly higher for novice teachers of grade 9 ( $M=2.18$ ) than the mean stress score for teachers of grades 6 to 8 ( $M=2.17$ ). When considering teaching assignment, novice secondary teachers of English had the highest mean stress score ( $M=2.27$ ).

Table 18

*Mean Total Stress Scores and Standard Deviations for Novice Secondary Teachers by Organizational Variables on the Teacher Stress Inventory*

Organizational Variable		M	SD	n
Grade Taught	6-8	2.17	.58	87
	9	2.18	.63	125
	10	2.04	.43	24
	11	2.05	.39	11
	12	1.98	.22	3
	Total	2.15	.58	250
Subject Taught	English	2.27	.63	60
	Mathematics	2.09	.56	39
	Science	2.18	.46	23
	Social Studies	2.14	.60	41
	Special Education	2.03	.49	57
	Elective Subject	2.21	.73	30
	Total	2.15	.58	250

*Note:* Total stress scale range is 1-5.

### ***Test of Hypothesis 6***

Hypothesis 6: Total stress score for novice secondary teachers will differ across organizational variables.

#### ***Grade Taught***

A one-way ANOVA was utilized to compare mean stress scores of the sample by the grade taught by the novice secondary teacher. Grade 12 received a low response rate and was combined for the analysis into one category with grade 11. The categories were assigned a code: 1=grades 6-8, 2=grade 9, 3=grade 10, and 4=grades 11-12. A one-way ANOVA indicated that the research hypothesis was rejected. The results of the ANOVA indicated no difference in the total stress score of the novice secondary teacher by grade taught ( $F(3, 247) = .640, p > .01$ ) (see Table 19).

#### ***Subject Taught***

A one-way ANOVA was utilized to compare mean stress scores of the sample by the subject taught. The categories were assigned a code: 1=English, 2=mathematics, 3=science, 4=social studies, 5=special education, and 6=elective subject. The one-way ANOVA indicated that the research hypothesis was rejected. The results of the ANOVA indicated no difference in the total stress score of the novice secondary teacher by subject taught ( $F(5, 245) = 1.133, p > .01$ ).



Table 19

*One-way Analyses of Variance for Effects of Organizational Variables on Total Stress Scores of Novice Secondary Teachers*

Variable and Source		SS	df	MS	F	p
Grade taught	Between Groups	.657	3	.219	.640	.590
	Within Groups	83.876	247	.342		
	Total	84.533	250			
Subject Taught	Between Groups	1.924	5	.385	1.133	.344
	Within Groups	82.921	245	.340		
	Total	84.846	250			

### **Hypothesis Summary**

The three broad research questions suggested specific hypotheses. Research question one was considered in four hypotheses:

*Hypothesis 1:* Sources of stress for novice secondary teachers will significantly predict the perception of initiating structure leadership behavior of their principal.

*Result:* Stepwise regression revealed professional investment was the single most reliable source of stress to predict initiating structure leadership behavior. The most efficient combination of variables to predict initiating structure leadership behavior included professional investment and time management.

*Hypothesis 2:* Sources of stress for novice secondary teachers will significantly predict the perception of consideration leadership behavior of their principal.

*Result:* Stepwise regression revealed professional investment was the single most efficient source of stress to predict consideration leadership behavior. The most reliable combination of variables to predict consideration leadership behavior included professional investment and professional distress.

*Hypothesis 3:* Manifestations of stress for novice secondary teachers will significantly predict the perception of initiating structure leadership behavior of their principal.

*Result:* Stepwise regression revealed emotional manifestation was the single most reliable manifestation of stress to predict initiating structure leadership behavior. The most efficient combination of variables to predict initiating structure behavior included emotional manifestation and behavioral manifestation.

*Hypothesis 4:* Manifestations of stress for novice secondary teachers will significantly predict the perception of consideration leadership behavior of their principal.

*Result:* Stepwise regression revealed emotional manifestation was the single most efficient manifestation of stress to predict consideration leadership behavior. The most reliable combination of variables to predict consideration behavior included emotional manifestation and gastronomical manifestation.

Research question two, regarding the influence of demographic variables, and research question three, regarding the influence of organizational variables, suggested an associated hypothesis.

*Hypothesis 5:* Total stress scores for novice secondary teachers will differ across demographic variables.

*Result:* One-way ANOVA was applied to determine the influence of demographic variables on the total stress score of the novice teacher. Demographic variables included gender, race, age, marital status, level of education, and certification path. The research hypothesis was rejected for each demographic variable.

*Hypothesis 6:* Total stress scores for novice secondary teachers will differ across organizational variables.

*Result:* One-way ANOVA was applied to determine the influence of organizational variables on the total stress score of the novice teacher. Organizational variables included the grade taught by the novice teacher and the subject taught. The research hypothesis was rejected for each organizational variable.

### **Summary**

The primary purpose of this study was to determine if stress in novice secondary teachers is significantly related to perceived leadership behavior of secondary school principals. Research has linked the teacher's perceptions of principal leadership to teacher retention (Fiore & Whitaker, 2005; Leithwood, Jantzi, & Steinbach, 2002). Supportive principal leadership has been associated with satisfaction and retention of the teacher while the cumulative effect of stress has been associated with dissatisfaction and teacher turnover (e.g., Betancourt-Smith, Inman, & Marlow, 1994; Hirsch, 2005, 2006; Ingersoll, 2001, 2003). An empirical examination of the relationship between perceived principal leadership and stress in the novice teacher may provide insight into retention and recruitment strategies and programs of principal leadership preparation and practice.

The target population was novice secondary teachers and the sample included novice secondary teachers from four large districts in the state of Louisiana. The sample was predominantly Caucasian (85%) and African-American (10%). Additionally, the participants surveyed were overwhelmingly female and under the age of 30. A majority held a Bachelor's degree and was in the second semester of teaching. Half of the respondents taught grade 9. Approximately 25% taught English and 25% taught special education.

A three-part online survey collected data regarding demographic and organizational variables, sources and manifestations of stress for the novice secondary teacher, and the novice teacher perception of principal leadership behavior. Time management was the source of stress with the highest mean subscale score. Fatigue manifestation was the manifestation of stress with the highest mean subscale score. The perception of principal leadership behavior as consideration behavior had a higher mean score than initiating structure behavior.

Research question one asks if an empirical relationship exists between perceived secondary leadership behavior and the stress of novice secondary teachers. Stress was operationally defined along ten quantifiable subscales to include five sources of stress and five manifestations of stress. The five sources of stress exhibited a significant inter-correlation. Professional investment and professional distress were the most strongly inter-correlated sources of stress. The five manifestations of stress were also significantly inter-correlated. Fatigue manifestation and emotional manifestation were the most strongly inter-correlated sources of stress.

A stepwise multiple regression proposed two models as predictor variables. Professional investment was the strongest predictor ( $p < .001$ ) of perceived initiating structure and consideration leadership behaviors. Emotional manifestation significantly predicted initiating

structure and consideration leadership behaviors. Model 1 and model 2 predictor variables proposed by the stepwise regression were significant at  $p < .001$ .

Research question two examined the relationship of demographic variables to stress in the novice secondary teacher. Demographic variables included gender, age, race, marital status, level of education, semesters of experience and certification path. The results of the ANOVA indicated the research hypothesis was rejected for each of the demographic variables.

Research question three examined the relationship of the organizational variables to stress in the novice secondary teacher. Organizational variables include subject taught and grade taught. The research hypothesis for each organizational variable was also rejected.

The results outlined in this chapter are discussed in Chapter 5. Practical implications and the relationship to the current body of scholarly research will be presented. Additionally, limitations of this current study, implications of this study, and suggestions for future research endeavors will be offered.

## **CHAPTER FIVE**

### **Introduction**

The renewed emphasis on highly qualified teachers, embedded within modern accountability initiatives, underscores the importance of principal leadership. Principal leadership impacts classroom outcomes through the recruitment, support, and retention of successful teachers (Leithwood et al., 2004; Waters, Marzano, & McNulty, 2003). Additionally, principal leadership bears the responsibility for establishing organizational processes that sustain teacher and student learning.

Teaching is a stressful endeavor (Kyriacou, 2000, 2001). The looming shortage of teachers adds a dimension of concern and serves to toughen the issue for districts struggling to meet mandated school improvement criteria. Thus, the guiding purpose of this study was to determine if a significant relationship exists between perceived principal leadership behavior and stress experienced by novice secondary teachers. The results of this study revealed primary sources of stress for novice teachers, common manifestations of stress, and their relationship to perception of principal leadership behavior.

Chapter 5 presents a discussion of the results and connects the findings to theory and research. The chapter is organized into seven sections. In the introduction the organization of the chapter is outlined. The second section includes an overview of the study. In the third section, a discussion of findings by themes is included. In section three, the findings are framed within the context of current research and theory. The limitations of this study are presented in the fourth section. The fifth section is devoted to a discussion of implications for future study. Future research possibilities are presented in the sixth section. Lastly, conclusions regarding stress in novice secondary teachers and perceptions of principal leadership behavior are shared.

## Overview of the Study

This study revealed the sources of stress and manifestations of stress that were most significant to novice secondary teachers. Additionally, the participants categorized the leadership behavior of their principals as initiating structure or consideration. A purposive sample was selected from four of the largest districts in the state of Louisiana. A total of 250 novice secondary teachers were included in the sample.

A large portion of the existing literature seeks to document principal-teacher interaction in the elementary schools. Teacher stress and dissatisfaction have been authenticated in elementary education teachers (Thomas, Clarke, & Lavery, 2003; Wheelan & Kesselring, 2005). Additionally, stress is distinctly different for teachers of lower grades and teachers of upper grades (Byrne, 1992). Thus, this study sought to enlarge the conceptualization of the principal and novice teacher relationship in a secondary setting.

Data were collected through a three-part survey questionnaire which was administered online. Part one of the survey was an inventory from the *Teacher Stress Inventory (TSI)* comprised of ten items devoted to collecting general demographic and organizational data on the participants (Fimian, 1988). Part two of the survey included items from the TSI (Fimian). In the TSI, the construct of teacher stress was quantified along two general subscale categories, sources of stress and manifestations of stress. Subscale scores for the five sources of stress and five manifestations of stress combined for a total stress score. Part three of the survey contained 20 items from the *Leader Behavior Description Questionnaire (LBDQ)*, Form XII, Short Form (Stogdill, 1963). The LBDQ, Form XII allowed for perceived principal leadership behavior to be measured along two subscale dimensions: initiating structure behavior and consideration

behavior. Ten questions were linked with initiating structure behavior and ten questions were linked with consideration behavior.

Descriptive statistics were used to report the results of the survey by categorical demographic variables. Subscale scores ranged from 1 to 5, with 5 indicating the source of stress or manifestation of stress to be extremely noticeable. Stepwise regression was applied to determine the predictive strength of stress, as quantified by the novice secondary teacher, on the perception of leadership behavior. The results of this study yielded valuable insights from novice teachers in the secondary schools.

## **Discussion of Findings**

### ***Stress Subscales***

Twenty-nine questions were associated with five sources of stress for the novice secondary teacher. Sources of stress included five subscale scores: time management, work-related stressors, professional distress, discipline and motivation, and professional investment. The results regarding sources of stress reflected relevant contemporary issues for teachers. Time management, along with discipline and motivation, were the top two sources of stress for novice teachers. The most potent source of stress for novice teachers originated from teachers' urgent need to balance disproportionate time demands against limited available time. The means and standard deviations for each stress subscale were calculated to determine the highest mean scores. Time management had the highest mean score as a source of stress. This result confirmed existing research on teacher turnover. Time demands and heavy workloads are top reasons cited by teachers leaving the profession (Metropolitan Life, 2003, 2005, 2006).



The challenge of managing student behavior and student engagement in the classroom was a second significant source of stress for teachers. The state of Louisiana has validated this as a concern for teachers. In 2003, the Louisiana Legislature passed the *Juvenile Justice Reform Act 1225*, mandating a master plan for improving student behavior and discipline (Louisiana Department of Education, 2003). The state model to improve student behavior, *Positive Behavior Interventions and Support*, has been fully implemented in the four districts that participated in this study (Louisiana Department of Education, 2008b). Yet, according to the results of the present study, the concerns that serve as an impetus for the state model persist.

Twenty questions were associated with five manifestations of stress for the novice secondary teacher. The manifestations of stress included emotional manifestation, fatigue manifestation, cardiovascular manifestation, gastronomical manifestation, and behavioral manifestation. The mean scores revealed that extreme weariness and physical exhaustion were components of the most common manifestation of stress. Novice teachers were predominantly tired and anxious. These results also reflected relevant issues facing the contemporary teacher. Fatigue manifestation and emotional manifestation were the most conspicuous manifestations of stress. These results paralleled the findings of Maslach, Schaufeli, and Leiter (2001). The researchers identified exhaustion as the primary response to sustained stress and a meaningful precursor to absenteeism and turnover.

### ***Leadership Behavior Subscales***

Novice teachers classified the principals' leadership behavior as consideration behavior. Consideration behavior characterized leadership behavior that was attentive to the needs and contributions of the teachers. This result is also consistent with the expectations set forth in the state certification requirements outlined for new teachers. The Louisiana Teacher Assistance and

Assessment Program (LATAAP) has specified the nature of the relationship between novice teacher and principal. LATAAP has mandated certain elements of the principal and novice teacher relationship that must be formally documented. The principal's responsibilities to the novice teacher, as outlined by the state, could be regarded as consideration behavior. They include working with the teacher to create a personal professional growth plan, securing resources for the new teacher, working with a support team alongside the new teacher, and facilitating new teacher-mentor interactions (Louisiana Department of Education, 2008b).

The remaining discussion is organized into two broad categories. First, stress for the novice secondary teacher and perceptions of principal leadership behavior are discussed. This broad heading is further subdivided into a discussion of the sources of stress for the novice teacher and the manifestations of stress. Second, the influence of demographic and organizational variables on stress is presented.

### ***Stress for Novice Secondary Teachers as a Predictor of the Perception of Principal Leadership Behavior***

#### ***Sources of Stress***

Sources of stress included five subscale scores: time management, work-related stressors, professional distress, discipline and motivation, and professional investment. Stepwise regressions generated two models. According to Dr. N.T. McDaniel, McNeese State University professor of statistical analysis, (personal communication, September 2009), predictor variables are regarded as efficient when they can predict with the smallest degree of variability and SPSS will exclude variables from consideration if they are not efficient. The first model included the single best predictor variable, and the second model identified the most meaningful combination of predictor variables.

Stepwise regression in this study yielded professional investment as the single most efficient predictor of initiating structure leadership behavior. A second model was generated to include the most significant combination of predictor variables. In the second model, time management was added to professional investment as the most efficient set of predictor variables. Time management, as noted previously, was the most significant source of stress for the novice teacher. Initiating structure behavior was procedurally-driven and focused on the task to be accomplished. Initiating structure leadership behavior gave task-oriented and process-driven attention to organizational details. Common examples of initiating structure behavior in the secondary school principal could include development of duty roster assignments and schedules, clarification of organizational rules and procedures, communication of details regarding the importance of deadlines, and evaluation of teacher performance. Initiating structure leadership behavior was primarily concerned with the formalized goals and outcomes of the organization.

Professional investment described the diminished autonomy a teacher experiences when the locus of control is outside of the classroom (Fimian & Fastenau, 1990). The term autonomy as applied here referred to the teacher's control over professional actions. As an example, the creation of an assessment that was once the individual responsibility of the classroom teacher may now be formalized as a common assessment for all teachers of a particular subject. Another example may relate to the teacher's discretionary time. Ancillary committees, like school improvement teams or faculty study groups, are often assigned to meet during planning time or free time before and after school. Assigning teachers to serve on committees and scheduling the meetings of the committees are traditionally a principal's responsibility.

These results affirm the findings in the extant literature. Lee and his colleagues (1991) placed teacher autonomy into the context of teacher self-efficacy and job satisfaction. The guiding question of Lee and his colleagues examined factors that influence teachers' control over their classroom environments. These researchers established that teacher self-efficacy and autonomy were connected to the teachers' degree of control. Teacher autonomy flourished under principal leadership that encouraged teachers to make autonomous decisions. Rosenholtz and Simpson (1990) affirmed that stance in their argument for the centrality of principal leadership to organizational context. The researchers found autonomy to be one of the highest correlates of teacher satisfaction and commitment.

Staw and Salancik (1977) connected initiating structure leadership behavior to reduced commitment in employees. Thus, a principal who regularly provides detailed directions to teachers regarding implementation of pedagogical techniques and assessment strategies would contribute to reduced teacher autonomy. The diminished autonomy would, in turn, minimize the teacher's sense of responsibility and could serve to reduce their commitment to the organization.

In Herzberg's theory of motivation, hygiene factors were exogenous environmental aspects over which employees had little control. Professional investment and time management could be considered hygiene factors because the locus of control is often placed outside of the teacher's classroom. Contemporary analyses of teacher turnover revealed that teachers were leaving the profession citing lack of planning time, assessment-based accountability responsibilities, and heavy workloads as sources of dissatisfaction (Alliance for Excellent Education, 2005; Metropolitan Life, 2005).

Stepwise regression revealed professional investment was also a significant predictor of consideration leadership behavior. Stepwise regression generated a second model of the most

significant set of predictor variables. In the second model, professional distress was added to professional investment as the most efficient set of predictor variables for consideration leadership behavior. Consideration leadership behavior is characterized as recognizing subordinates and serving to augment job satisfaction. Examples of consideration behavior might include supporting the teacher in confrontations with parents, affirming the teacher's management of student behavior, recognizing the teacher's accomplishments, treating teachers equitably and without favoritism, and involving the teacher in shared decision-making. Richards (2003, 2005) affirms the notion that principal support is critical to satisfaction and morale. Of particular concern to teachers is the support of the principal leadership in matters of student discipline (Richards).

According to Kouzes and Posner (2007) and Fullan (1991), principal leadership is socially embedded and thus implies a relationship with others in the organization (Hallinger & Heck, 1998; Leithwood & Duke, 1999). Not surprisingly, public high school teachers who perceive their school principals to be supportive have been found to be more likely to continue teaching than those who do not share that view (National Science Board, 2008). The extant literature established strong connections between the teachers' perceptions of their school leadership and teacher retention. Research has documented a correlation between supportive principals and teacher retention (Hirsch & Emerick, 2007; Hirsch & Emerick, 2006a, 2006b, 2007). In addition, teachers have identified an uncaring attitude and a failure to listen as negative principal leadership behaviors that contributed to a lack of trust (Kouzes & Posner, 2007).

The same predictor variable, professional investment, was a significant predictor for two different dimensions of leadership behavior. At first glance, the results seemed counterintuitive. However, the extant literature revealed that initiating leadership behavior and consideration

leadership behavior were often statistically interconnected (Bass, 1990; Blase, 1987; Brown & Sikes, 2001). This seemingly conflicting result, one predictor for two divergent leadership behaviors, underscored the necessity of a holistic approach to any interpretation of results.

All initiating behavior does not necessarily produce dissatisfaction. Some initiating structure behaviors may be necessary for the successful principal. As an example, clear delineation of responsibilities is important to the teacher's understanding of the job description. Principals must clarify the standards of performance and expectations that allow the teacher to define successful achievements. Initiating behavior formalizes expectations and can be a vehicle for clearly communicating the shared vision for the school. Similarly, all consideration behaviors do not necessarily produce satisfaction. A principal that is rated high in consideration leadership behavior may have difficulty articulating those expectations and thus, would not foster satisfaction for the teacher.

A second example of initiating structure behavior is exemplified by the principal who ensures teachers have adequate resources and materials. An organized principal will secure what is necessary for teachers and probably do so in anticipation of the need. Thus, this initiating leadership behavior is authoritative and proactive rather than coercive (Rosenholtz & Simpson, 1990). Loeb and Darling-Hammond (2003) affirmed the vital importance of this initiating structure behavior in a study of California schools, linking teacher turnover to an adequate supply of student textbooks. A principal that is perceived to be strong in consideration behavior might not get around to the organizational detail of ordering textbooks. Inadequate resources would diminish a teacher's sense of autonomy and classroom control. Therefore, professional investment was also a significant predictor of consideration leadership behavior.

Professional distress is thought to describe how the teacher perceives himself as a professional and may include advancement opportunities, status and respect, and recognition for achievements. Encouragement and recognition have been identified as intrinsic motivators that contribute to teacher satisfaction (Blase & Kirby, 1992; Richards, 2003, 2005). Herzberg's model classified professional distress as a motivation factor because it represented an endogenous aspect of the work content (Bolman & Deal, 2003). This result also aligned with the extant literature. Teachers felt empowered when principal leadership ensured an organizational climate that was firmly encouraging. Lee and his colleagues (1991) operationally defined efficacy as one's perception of expected success in a task, while satisfaction was the affective response to the achievement of that goal. These researchers found that principal leadership was positively associated with efficacy. Similarly, a supportive principal strongly correlated with teacher retention (Hirsch, 2005; Hirsch & Emerick, 2007; Lambert, 1998).

Stepwise regression, therefore, generated two models of predictor variables for each type of leadership behavior. The first model identified the most significant single source of stress as an efficient predictor. The second model generated the most efficient combination of predictor variables. The results are summarized in Table 20.

Table 20

Summary of Stepwise Regression Results: Sources of Stress in Novice Teachers as Predictors of Principal Leadership Behavior

Leadership Behavior	Most Efficient Predictor Models	
	Model 1	Model 2
Initiating Structure	Professional investment	Professional investment Time management
Consideration	Professional investment	Professional investment Professional distress

*Note:* N=250.



### *Manifestations of Stress*

A manifestation of stress refers to a symptom or primary response to a stressor. Manifestations of stress have been strongly linked to a propensity to leave an organization (Hirsch, 2006). Additionally, job satisfaction and commitment to an organization have often been classified as secondary responses to stressors (Parasuraman & Alutto, 1984). A stepwise regression generated two models of predictor variables. The first model identified emotional manifestation as a significant predictor of initiating structure leadership behavior. The second model added behavioral manifestation to emotional manifestation as the most efficient combination of predictor variables. Emotional manifestations described the various emotional responses to teaching stress. Examples of emotional manifestations might include anxiety, vulnerability, and insecurity, sleep disturbances, restlessness, and irritability. Behavioral manifestations would include frequent absenteeism, chronic tardiness to work, withdrawal, frequent employee errors, and ultimately turnover. These findings aligned with the extant literature regarding morale and burnout.

According to Lee and colleagues (1991), strong organizations foster a sense of well-being in teachers that arises from a sense of efficacy and confidence. Additionally, healthy schools are identified as places where teachers are confident and morale is optimal. Emotional manifestation and behavioral manifestation of stress stand in direct opposition to the concept of an organization with robust morale. When taken together, emotional and behavioral manifestations depict an erosion of engagement, as described by Maslach, Schaufeli, and Leiter (2001). Teaching can be a challenge. Novice teachers deal with the additional component of inexperience. Thus, given the harsh realities of excessive workloads, time demands, difficulties with student behavior, the results of this study contributed to a holistic view of stress for the novice teacher.

Stepwise regression also proposed emotional manifestation as the single most efficient predictor of consideration leadership behavior. The second model added gastronomical manifestation to emotional manifestation as the most efficient set of predictor variables. Gastronomical manifestation was one health-related outcome of stress identified by Selye (1955). The physiological responses to stress have been well documented in the literature since 1955 when Selye first proposed the connection (Kyriacou, 2000). Gastronomical manifestations included stomach aches, upset stomach, ulcers, abdominal tightness, and intestinal disorders.

Leadership behavior becomes important when the results of this study are framed within the culture of accountability. It is generally agreed that assessment-based accountability initiatives are stressful (Popham, 2001). Principals find that their responsibilities funnel into a concentrated period of examination, a single point in time called state testing. Additionally, accountability measures traditionally include student attendance and dropout data, course failures, graduation rates, subgroup performance indicators, along with the number of highly qualified teachers (Louisiana Department of Education, 2008b). Again, a holistic review prompts one to consider both dimensions of principal leadership behavior. Initiating structure behavior would focus primarily on tracking the data and details of student achievement. As an example, many districts have mandated that a principal follow-up with teachers of failing students. Consideration behavior would work to affirm successful teachers publicly and privately. Praise, encouragement, and recognition for outstanding work could also be important leadership behaviors.

The regression models that utilized manifestations of stress as the predictor variables yielded weak, but significant results. Weak results were evidenced in the small coefficients of determination ( $R^2$ ). The small coefficients of determination could have been a function of

multicollinearity of the predictor variables (manifestations of stress). Highly inter-correlated variables realized a diminished ability to predict. However, the survey questions that addressed the manifestations of stress pursued potentially sensitive information. The personal nature of the questions may have precluded easy access to consistent results because of a reluctance to disclose information of such a personal nature.

Stepwise regression, therefore, generated two models of predictor variables for each type of leadership behavior. The first model identified the most significant single manifestation of stress as a predictor. The second model generated the most efficient combination, or set of manifestations as predictors. The results are summarized in Table 21.

Table 21

Summary of Stepwise Regression Results: Manifestations of Stress in Novice Teachers as Predictors of Principal Leadership Behavior

Leadership Behavior	Most Efficient Predictor Models	
	Model 1	Model 2
Initiating Structure	Emotional manifestation	Emotional manifestation Behavioral manifestation
Consideration	Emotional manifestation	Emotional manifestation Gastronomical manifestation

***Demographic and Organizational Variables of Novice Secondary Teachers and Total Stress Scores***

Demographic variables were those over which the novice secondary teacher had no control (Gay & Airasian, 2003). The mean stress scores were calculated for gender, race, age, marital status, level of education, semesters of experience, and certification path. Organizational variables were those aspects of the teaching assignment that were externally controlled and

assigned to the novice teacher as part of the principal's administrative duties. Organizational variables included the subject taught and the grade taught.

Eighty-five percent of the participants were Caucasian and 10% African-American. Additionally, 89% of the participants surveyed were female and 11% male. The teachers' levels of education included within the sample ranged from a Bachelor's degree to a Doctorate. Eighty-two percent held a Bachelor's degree; there were 15% with a Master's degree, 1.5% with Master's degree plus 30 graduate hours, and 1.5% with a Doctorate. The respondents were predominantly under the age of 30 and had less than two years of teaching experience. Seventy-five percent of the participants taught grades 6 to 9. Half of the sample taught English (24%) or Special Education (23%), while 16% taught mathematics.

Generally, when the total stress scores were sorted by demographic data, the results paralleled the extant literature and yielded no surprises. As an example, female novice teachers reported higher stress levels than males. The youngest teachers, transitioning from college student to young professional, indicated the highest levels of stress. Those assigned to teach out-of-field (OFAT) experienced the greatest stress.

One-way ANOVA was utilized to compare mean stress score for each of the demographic and organizational variables. All of the results indicated rejection of the research hypothesis. There were mixed results in the extant literature regarding the influence of demographic variables. As an example, Friesen and Williams (1985) established that stressors in the teachers' personal life were significant predictors of overall stress. However, the researchers also established that a background variable, like gender, did not contribute to the overall stress in the teacher. Maslach and other researchers (2001) argued an opposing position based on their result. The researchers found that females were more likely to report exhaustion than their male

counterparts, with excessive workloads having the most direct influence. The one-way ANOVAs for each demographic and organizational variable yielded no significant results.

### **Limitations of the Study**

Limitations describe aspects of the research study over which the researcher has no control (Gay & Airasian, 2003). Thus, the limitation may also identify potential weaknesses in the design. There were five limitations in this research design that may have influenced the outcomes. One limitation of this cross-sectional survey study resulted from the collection of data at one single point in time. This may have yielded an adequate perspective (Gay & Airasian, 2003). Generalizations that evolved from this single snapshot must be considered within the constraints of the time perspective (Leedy & Ormrod, 2005). Additionally, the survey gathered information only about the specified questions (Hair et al., 1995). Although this permitted the researcher to specify the topic, it did not allow the respondents to elaborate and thus, perhaps compromised the depth of the data.

The second limitation hinged upon technology available to the participant and their familiarity with internet navigation. An inherent assumption in online surveys is availability of technology and capability of the participant. The survey was not made available in any other format. Thus, responses were limited to those comfortable with the technology. Additionally, self-reported responses on a survey questionnaire could receive a low response rate while it may also be possible that emailed questionnaires were answered multiple times (Gay & Airasian, 2003).

A third related limitation was the dates of data collection. The electronic surveys were opened during the spring of the school year. Many scheduling issues made data collection

problematic. Spring break, state accountability assessments, new teacher evaluations, and mandated end-of-course testing were scheduled for the spring.

Fourth, self-reported data can be distorted, especially when one is describing an attitude or an opinion (Leedy & Ormrod, 2005). If the respondent had not previously considered the issue addressed in the questionnaire, then it was possible that his or her responses reflected only the context of the moment, rather than an enduring contextual reality. This could be a consideration in an analysis of the results for manifestations of stress. Manifestations of stress are not static but dynamic. The teachers' responses may not reflect a realistic assessment but rather an impression of how they felt at that moment.

The fifth limitation was the possibility that the respondents could have purposefully misrepresented themselves because they may have wanted to tell the researcher what they anticipated the researcher wanted to hear (Leedy & Ormrod, 2005). It was possible that participants determined the intent of the instrument and provided socially acceptable answers. As an example, the questions associated with the manifestations of stress were extremely personal. The respondents may have been reluctant to disclose the information and therefore provided responses that misrepresented their reality.

### **Implications of the Study**

The purpose of this study was to determine if a significant relationship existed between the perceived leadership behavior of secondary school principals and the stress in novice secondary school teachers. Research has suggested that important differences in teacher turnover rates and retention may be attributed to principal leadership behavior (Blase, 1986; Darling-Hammond, 2003; Darling-Hammond, et al., 2007; Hirsch, 2006; Hirsch & Emerick, 2007; Quinn, 2005; Richards, 2003, 2005). The nature of principal leadership can be a powerful

predictor of teacher satisfaction and commitment (Brown & Sikes, 2001; Calabrese, 1987; Darling-Hammond & Post, 2000; Fiore & Whitaker, 2005). The findings of this study prompt considerations in three specific areas: programs of support for new teachers, preparation and training of principal leadership, and policies that are critical for the successful principal. The remainder of this section is organized around these three areas of consideration.

### ***Implications for Programs of Support***

The primary implication for these research results was retention of successful, highly qualified secondary teachers. NCLB (U.S. Department of Education, 2002) established a comprehensive model for teacher certification that emphasized explicit knowledge and mastery of content. The art of teaching and practical instructional skills were not articulated in NCLB. Thus, induction programs for novice teachers have become popular in the contemporary literature on teacher retention (Breux, 2003). Induction programs have emerged as the primary counterbalance for this deficit in the tacit knowledge necessary to successful teachers.

Deal and Peterson (1999) stressed the importance of building a successful school culture. They encouraged principal leadership to formulate a motivating mission and purpose first. Then, when the highly qualified teacher was hired, the principal was to spend time mentoring the new teacher to adopt that mission as his own. It is documented that teacher retention is influenced by the quality of the first teaching experiences. Thus, the development of a nurturing organizational culture may be crucial to satisfaction. The articulation of expectations (initiating structure behavior) and the formulation of a motivating vision (consideration behavior) would be integral components of a successful mentoring program.

The findings of this study indicated professional investment was the single most efficient predictor of both initiating structure and consideration leadership behavior. Thus, a sound



induction program might seek to protect the autonomy and discretionary time of the novice teacher. However, a good induction program would also work to avoid isolating the novice teacher because encouragement and support also contributed significantly to teacher satisfaction.

A secondary implication for a successful induction program would be mentoring. Novice teachers need affirmation and specialized guidance from a veteran teacher. Heifetz (1994) posited that leadership was “mobilizing people to tackle tough problems” (p. 15). The principal is in a position to cultivate the best teachers and recruit them to serve as mentors for novice teachers. Similarly, effective induction programs for novice teachers would equip them to confront difficulties that are inherent to teaching. As an example, one of the primary sources of stress for novice teachers in this study was student behavior. An effective program of induction would seek to build an understanding of the district’s discipline plan and support the teacher’s efforts in dealing with student behavior.

### ***Implications for Principal Leadership Preparation***

Training and preparation of principal leadership was a second implication for the findings of this study. Of primary importance was the need for school administrators to understand the dissatisfaction that fuels teacher turnover. The results of this study yielded insight into the unique issues confronting the novice secondary teacher. Novice teachers identified fatigue, emotional manifestations, and behavioral manifestations as significant issues. Districts realize the impact of these manifestations in teacher absenteeism. This erosion of engagement was acknowledged as the precursor to turnover (Maslach, et al., 2001) and disrupted the faculty stability. A stable staff can be especially meaningful to the secondary principal. A steady stream of new faculty members requires constant attention and energy. The challenge of retaining highly qualified

teachers underscored the evolving context for school leadership and highlighted the urgent need to build and maintain instructional capacity.

Jim Collins, in his book *Good to Great* (2001), emphasized a holistic approach to the leaders we need. Principal leadership must reflect a complex blend of leadership behaviors. The future leader of a school must be capable and willing to contribute to team efforts (consideration behavior) and manage the details of the organization competently (initiating structure). Additionally, the modern principal as instructional leader must be able to articulate a compelling mission and vision (consideration) and direct the data management regarding performance indicators of success (initiating structure).

Thus, the definition of principal leadership continues to evolve. The results of this study highlighted the importance of both dimensions of leadership behavior. A managerial component will always be necessary as a principal addresses organizational mandates. However, the contemporary principal has emerged as an instructional leader that must articulate a vision, administer an effective program of instruction, and nurture a positive organizational climate (Darling-Hammond & Post, 2000; Hallinger & McCary, 2000; Wallace Foundation, 2007). Clearly, contemporary principals must be trained to support powerful classroom instruction as they work to develop schools that support meaningful classroom engagement.

Improved leadership preparation yields a secondary implication. Leadership preparation programs may need to recalibrate. Thoughtfully designed and supervised administrative internships could provide realistic opportunities to train future school leadership. Additionally, principals need mentoring too. Peer support provided by veteran principals could be extremely valuable as the principal attempts to navigate the complexities of leading a secondary staff. The

findings of this study emphasized the importance of working collaboratively with teachers and supporting teachers in the process.

Modern leadership does not place the principal at the center of the organization. Instead, contemporary leadership has evolved to focus upon collaborative endeavors that serve to foster a sense of shared commitment (Deal & Peterson, 1999; Fullan, 2001; Darling-Hammond, et al., 2007). The results of this study indicated that principals must develop people by providing organizational structure as well as support and encouragement. Thus, the findings of this study may contribute to improved leadership preparation and practice that enhances the quality of future school leaders.

### ***Implications for Policy***

The accountability measures of NCLB prompted all stakeholders to examine the context and practice of principal leadership. The results of this study aligned with the changing conceptual elements of principal leadership. Principals influence student achievement when they nurture organizational environments that support teachers (Hallinger & McCary, 2000; Ross & Gray, 2006). The evolving nature of principal leadership was confirmed with the publication of the revised standards for school leadership. The priorities that guided the revision process specifically addressed the central role of student achievement, the increasingly collaborative nature of principal leadership, and empowerment of all stakeholders (CCSSO, 2008).

One approach that has been successfully utilized is the addition of administrative managers to the local school site (Wallace Foundation, 2009). These employees assume responsibility of administrative tasks that can restrict the principal's contact with the classroom teacher. Sample duties for an administrative manager might include compilation of accountability data for state and district reporting, updating personnel records for payroll,

supervision of textbook inventories, and maintenance of financial school records. In so doing, the principal is released to devote more time to instructional leadership.

The policies that drive the commitment of resources are often out of sync with the organizational needs of the district. Principals and teachers are inundated with a plethora of unfunded mandates. This often means an overload of multiple reform initiatives that do not align. The results of this study highlighted the importance of assuming a holistic view to leadership. Outlining expectations (initiating structure) was just as important as nurturing a collaborative culture (consideration). Expectations could not be articulated by the principal if the state and district directives were unclear. The presence of unwanted, uncoordinated policies served to transform the challenging job of principal into an overwhelming endeavor.

Directing the financial resources to support local initiatives and aligning those efforts with state and local policies could enhance principal leadership. However, when framed in harsh economic realities, the cost of providing meaningful principal support could become a prohibitive issue to district policy makers. Release time, stipends for university coursework, and mentors represent significant shifts in policy for most districts. The results of this study stressed the importance of principal leadership preparation and its potential influence on retaining qualified teachers. District policies must be dedicated to the infrastructure of support required to meet the needs of instructional leaders.

### **Recommendations for Further Research**

This research study yielded valuable insights regarding the relationship of stress for the novice secondary teacher and the perception of principal leadership behavior. This was a quantitative study that utilized inferential and descriptive statistical measures. Qualitative data were not collected regarding the unique experiences of the novice secondary teacher. Further

research could incorporate a qualitative component. A mixed-methods study would address one limitation of survey research. The addition of a qualitative component could add depth and clarity to the responses. In so doing, emergent themes could be identified regarding the distinctive issues that confront novice secondary teachers in the contemporary educational setting. The research could be of value to the training and preparation of principal leadership.

Additionally, further research could incorporate a self-assessment by the principal. A consideration of the principal's self-assessment in combination with the novice teacher's appraisal of the principal's leadership would yield more comprehensive insights. The novice secondary teacher's perception of leadership behavior presented only one side of the issue. It would be of value to examine the principal's evaluation of his own leadership behavior.

The organizational differences in public schools, charter schools, and private schools would merit an extension of this research. Private schools and charter schools do not operate under the same guidelines as traditional public schools. Although some similarities exist in principal certification and teacher certification requirements (Louisiana Department of Education, 2008a), the schools operate independently. They are generally organized as nonprofit endeavors and are governed by their own board of directors. Thus, a comparative analysis framed by the different organizational contexts could yield additional useful data.

Further research efforts could follow a cohort of teachers over time. A longitudinal application of these research procedures could yield a deeper contextual understanding of stress for the novice teacher and the relationship to perceptions of principal leadership. A longitudinal research study would address one of the limitations of this research. Teachers initially enter the profession with high expectations of satisfaction and intrinsic reward. A longitudinal study may reveal insight into the erosion of engagement. An additional layer of inquiry could examine

differences in large urban districts as well as rural districts. Both report high levels of teacher turnover and difficulty in securing highly qualified teachers. Yet, the community settings are distinctly different.

Further research could extend this study to education systems in other countries. A significant portion of the discussion surrounding education in the United States revolves upon a comparison of our student achievement when compared to other countries. The *Trends in International Mathematics and Science Study* (TIMSS) is frequently cited. TIMSS examined data from students, teachers, and principals in its assessment of student achievement worldwide (International Association for the Evaluation of Educational Achievement, 2009). Thus, successful principal leadership and teaching are international concerns. It would be of interest and of value to examine the relationship of novice secondary teacher stress and the perception of principal leadership as viewed through the lens of another country.

### **Summary**

The purpose of this study was to examine the relationship between stress of novice secondary teachers and their perception of principal leadership behavior. This research study found that time management, along with student discipline and motivation, were the most significant sources of stress for the novice teachers. Additionally, professional investment was the most efficient predictor for both initiating structure and consideration leadership behavior. This result underscored the importance of a holistic approach in the interpretation of results. The two leadership behaviors should not be placed at two ends of a spectrum or regarded as mutually exclusive characteristics. Instead, principal leadership is complex and best represented by a combination of the leadership behaviors.

The statistical analysis revealed that manifestations of stress were weak predictors, although significant in scope, regarding principal leadership behavior. The diminished predictive ability is statistically related to the inter-correlations of the instrument subscales. Additionally, the questions associated with the manifestations of stress were extremely personal. A limitation in the research design may have contributed to a reluctance to disclose the information to the researcher.

The capacity to recruit and retain highly qualified secondary teachers has become a contemporary issue of national concern. Teacher retention is inherently a human resource issue, and job satisfaction can be a dependable predictor of employee turnover. Thus, the implications for the results of this study addressed three broad areas. First, programs of support for new teachers are important. Thoughtful induction programs and supportive mentoring may be keys to retaining quality teachers. Second, the preparation and training of principal leadership must recalibrate to equip candidates for leadership in the schools of today. The results of this study highlight the need for school administrators to understand the dissatisfaction that potentially fuels teacher turnover. Third, district policies must align in support of principal leadership. Disconnected mandates and innovations create a difficult environment for principals to navigate. Districts must ensure the infrastructure of financial support is there to sustain effective instructional leadership.

Improving educational performance is the cornerstone of modern educational reform initiatives. Measures of student achievement outcomes are key indicators of success. Effective teachers directly impact student achievement. Additionally, teachers face numerous stressors that are often magnified for the novice. Therefore, the capacity to retain highly qualified teachers is a contemporary issue of concern to all educational stakeholders. Effective instructional leadership

has become an important goal for principals aiming to improve student achievement. It is the responsibility of principal leadership to articulate a vision for academic success and nurture teachers in the process. “The core leadership challenge of the coming millennium is to build schools in which every child can grow and every teacher can make a difference” (Deal & Peterson, 1999, p. 141).



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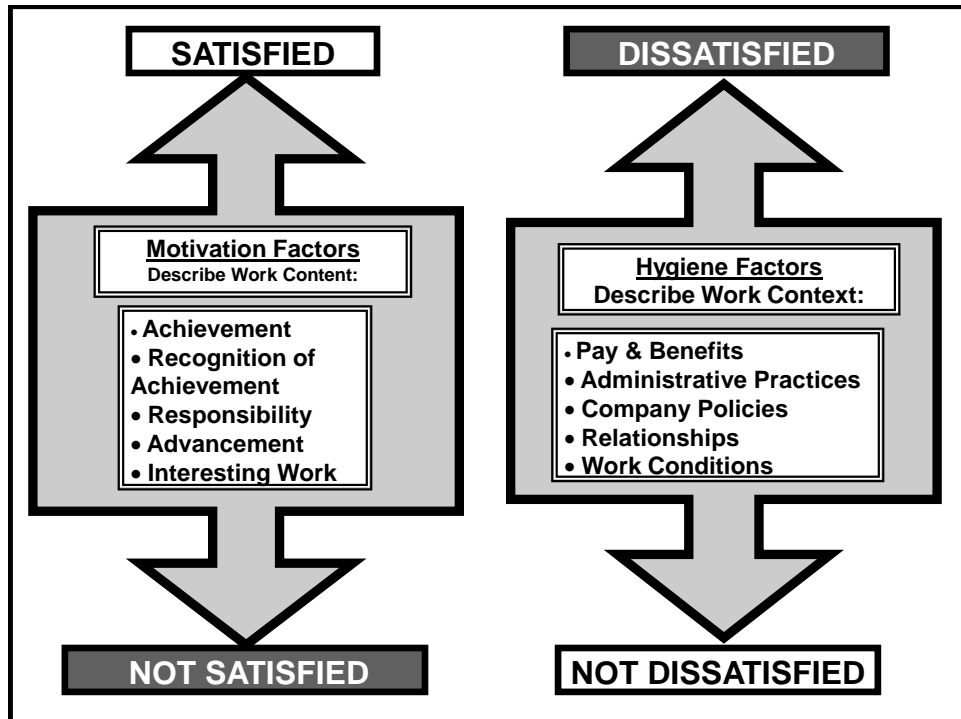
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## ***APPENDIX A***

### **Herzberg's Two-Factor Motivation Theory**

### **Herzberg's Two-Factor Motivation Theory**

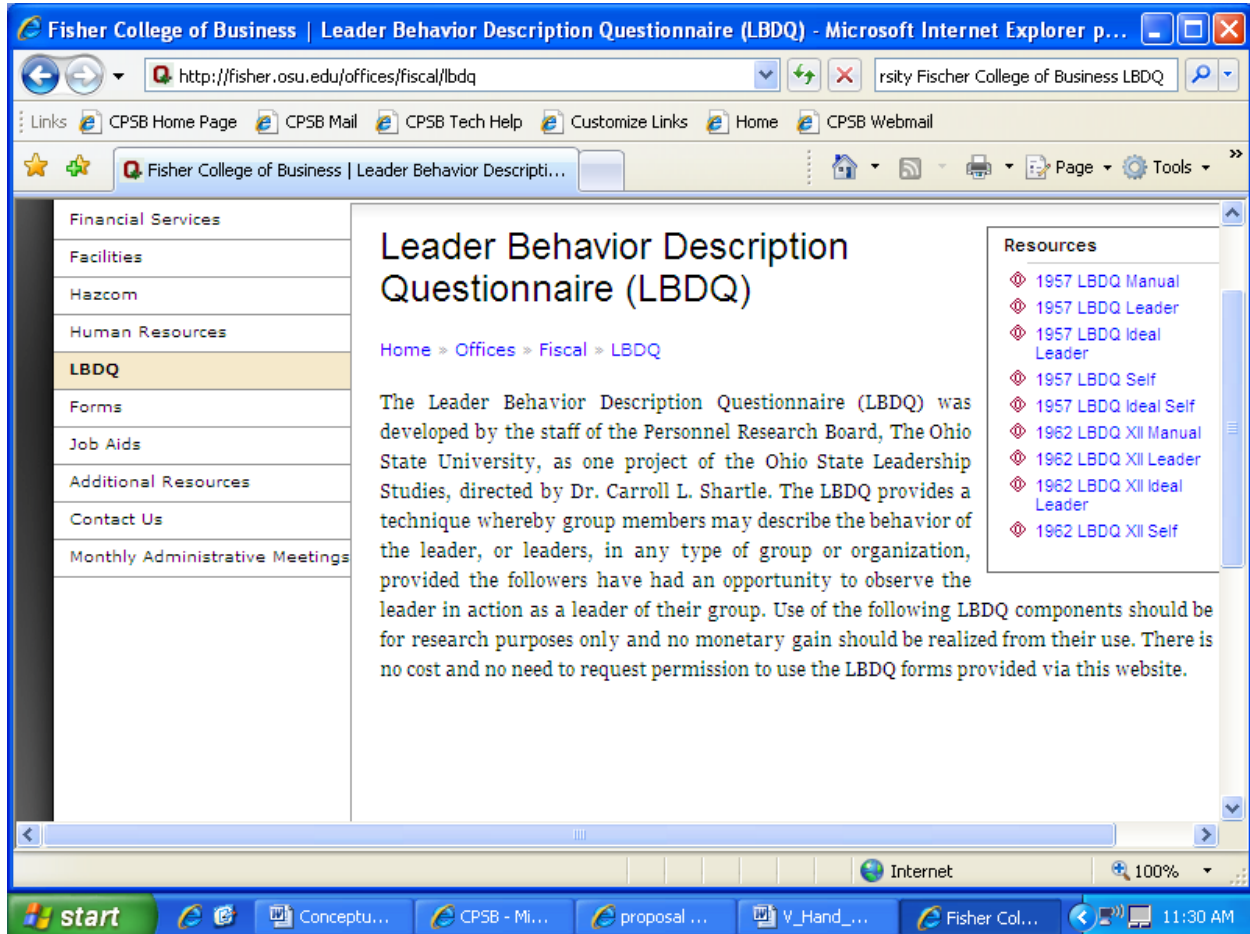


## ***APPENDIX B***

### **Permission to use the Leadership Behavior Description Questionnaire**



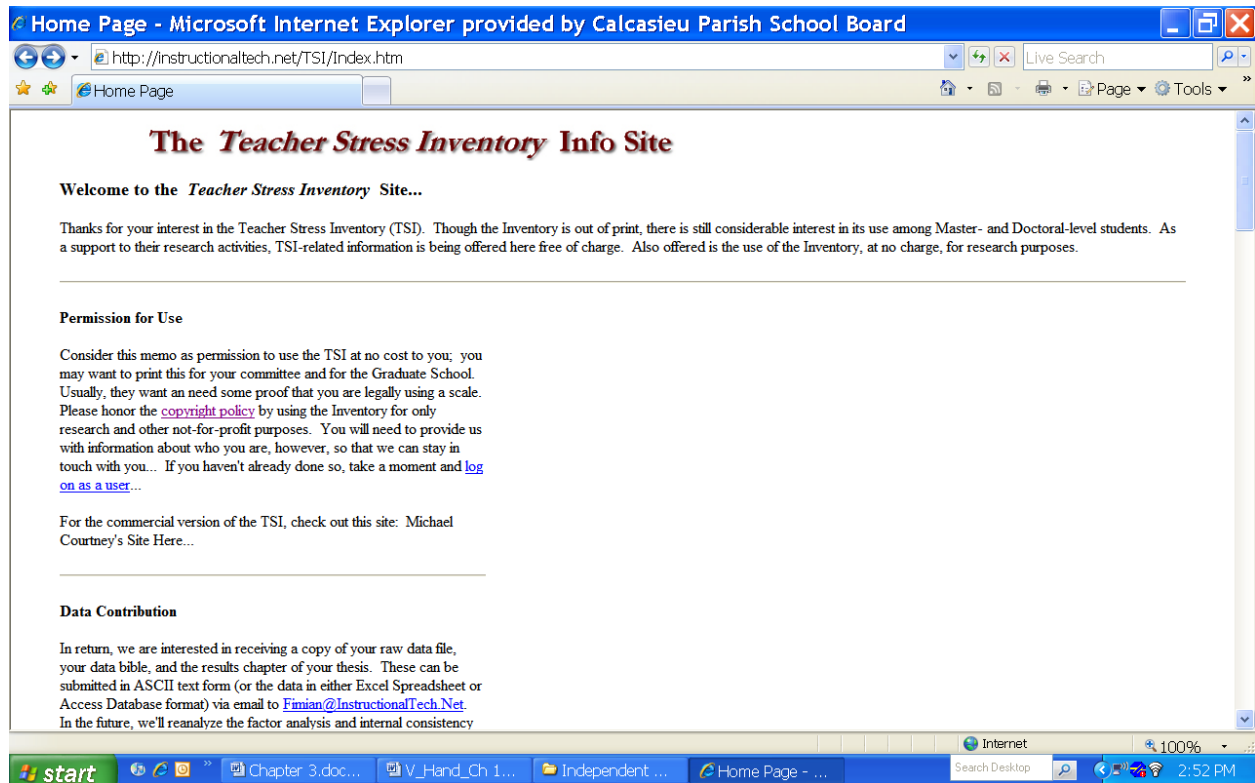
## Permission to use the Leadership Behavior Description Questionnaire



## **APPENDIX C**

### **Permission to use the *Teacher Stress Inventory***

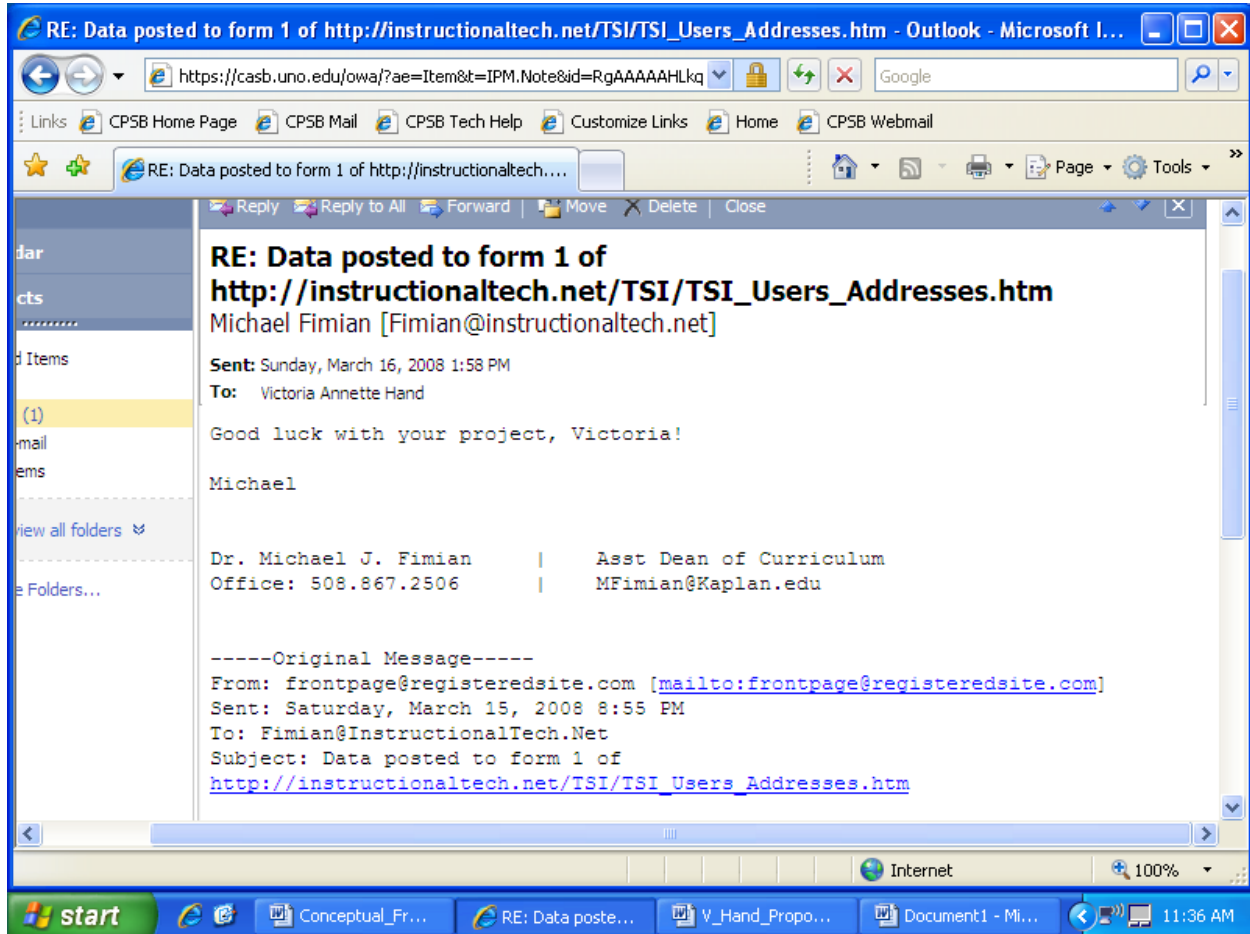
## Permission to use the *Teacher Stress Inventory*



## **APPENDIX D**

**Email verification of registration to use the *Teacher Stress Inventory***

## Email verification of registration to use the *Teacher Stress Inventory*

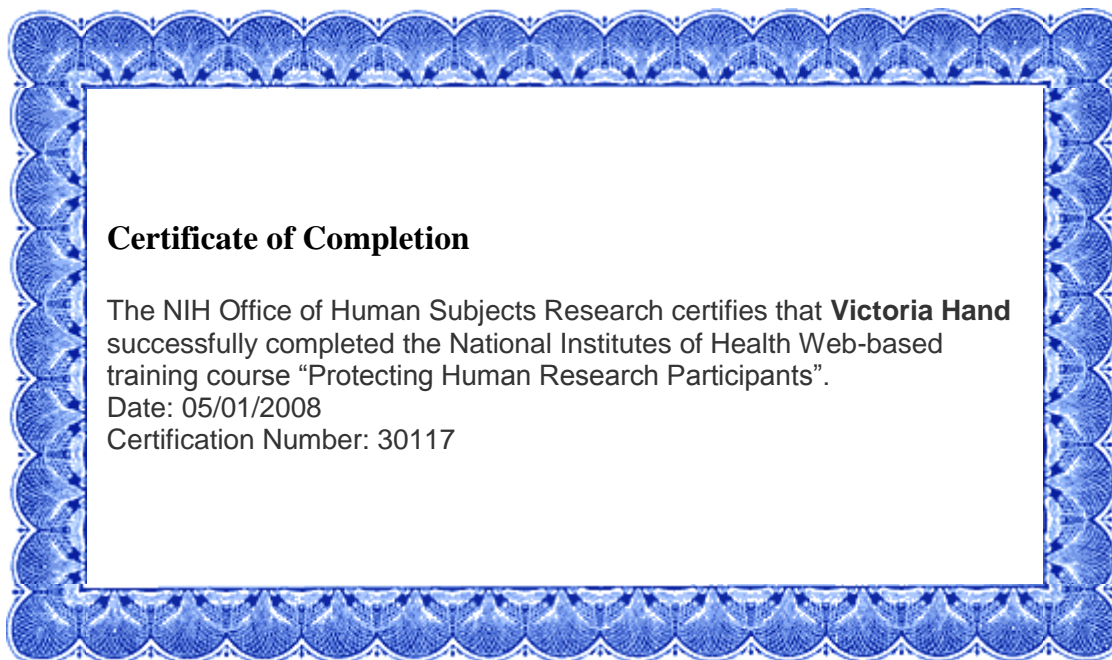


## **APPENDIX E**

### **National Institutes of Health Certification**

## APPENDIX E

### National Institutes of Health Certification



## **APPENDIX F**

### **Institutional Review Board Exemption Letter**



**Institutional Review Board Exemption Letter**

***University Committee for the Protection  
of Human Subjects in Research***

University of New Orleans

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*Campus Correspondence*

Principal Investigator: Tammie Causey-Konate

Co-Investigator(s): Victoria Hand

Date: March 26, 2009

Protocol Title: "Perceptions and Concerns of Novice High School  
Teachers"

IRB#: 06Apr09

The IRB has deemed that the research and procedures described in this protocol application are exempt from federal regulations under 45 CFR 46.101 category 2, due to the fact that anonymous surveys will be used and any disclosure of the human subjects' responses outside the research would not reasonably place the subjects at risk of criminal or civil liability or be damaging to the subjects' financial standing, employability, or reputation.

Exempt protocols do not have an expiration date; however, if there are any changes made to this protocol that may cause it to be no longer exempt from CFR 46, the IRB requires another standard application from the investigator(s) which should provide the same information that is in this application with changes that may have changed the exempt status.

If an adverse, unforeseen event occurs (e.g., physical, social, or emotional harm), you are required to inform the IRB as soon as possible after the event.

Best wishes on your project.

Sincerely,

Robert D. Laird, Ph.D., Chair

UNO Committee for the Protection of Human Subjects in Research

**Appendix G**  
**Letter to District Superintendents**

## Letter to District Superintendents

Dear District Superintendent:

I am a doctoral candidate conducting my dissertation study under the direction of Dr. Tammie Causey-Konate', an Associate Professor in the Department of Educational Leadership, Counseling, and Foundations at the University of New Orleans. The title of my dissertation is *Perceptions and Concerns of Novice Secondary School Teachers*. The guiding purpose is to provide relevant insights into the unique perceptions and concerns of novice teachers that potentially influence teacher retention.

Please assist me by granting permission to invite novice teachers in your district to participate in an electronic survey. I would like to work with \_\_\_\_\_, your district's LATAAP coordinator to contact the novice teachers in your district. In so doing, participant names would not be available to me and anonymity can be preserved. The electronic survey is security encrypted and identifying Internet Protocol (IP) addresses will not recorded.

The Institutional Review Board (IRB) has deemed that the research and procedures are compliant with the University of New Orleans guidelines. Please find attached a complete copy of the survey questions and IRB permission from the University of New Orleans. I will happily provide you with an Executive Summary of the results from this research.

Thank you in advance for you assistance. I will contact your office as a follow up to this letter in 3-5 days. Should you have any questions, please feel free to contact me by email: [Vicky.hand@cpsb.org](mailto:Vicky.hand@cpsb.org).

Sincerely,

Victoria Sanderlin Hand  
K-12 Educational Administration Doctoral Candidate  
Department of Educational Leadership, Counseling, and Foundations  
College of Education and Human Development  
University of New Orleans  
348 Bicentennial Education Center  
2000 Lakeshore Drive  
New Orleans, LA 70148  
[vhand@uno.edu](mailto:vhand@uno.edu)

## **Appendix H**

### **Email Request to District LATAAP Coordinators for Assistance in Distribution of the Online Survey**

## **Email Request to District LATAAP Coordinators for Assistance in Distribution of the Online Survey**

Dear LATAAP Coordinator,

I am a doctoral candidate conducting my dissertation study entitled *Perceptions and Concerns of Novice Secondary School Teachers*. The guiding purpose is to provide relevant insights into the unique perceptions and concerns of novice teachers that potentially influence teacher retention.

Your superintendent, \_\_\_\_\_, has granted permission (see the attachment) to collect data for your school district. You are listed as the LATAAP coordinator and I need your assistance in sending an email to all new teachers in your district (i.e. teachers that have completed 6 consecutive semesters of teaching). I do not wish to place an unnecessary burden that adds to your work load, but I would be so grateful for your assistance. The purpose of having you forward the email preserves the participants' confidentiality.

The email for your district's teachers includes a brief explanation and a link to an electronic survey. Teachers have the opportunity at the end of the survey to enter a drawing for a \$200 Walmart gift certificate. I will happily enter you in the drawing as a small incentive to assist me.

Thus, anything that you can do to expedite the email would be appreciated. The email to be forwarded will immediately follow this one. I will follow up tomorrow with a phone call to your office.

If you have any question or concerns, please do not hesitate to contact me. I'm the high school math supervisor in Calcasieu Parish, so I will include my office contact numbers too.

It is my prayer that your day is blessed.

Warmest regards,  
Victoria (Vicky) Hand  
Office: 337.217.4160 ext. 1310  
Cell: 337.802.4377

## **Appendix I**

### **Email Invitation to Novice Teachers to Participate in the Online Survey**

## Email Invitation to Novice Teachers to Participate in the Online Survey

**Please consider participating in the survey**

**[https://www.surveymonkey.com/s.aspx?sm=1393qjUNii0YTYihzJHfdw\\_3d\\_3d](https://www.surveymonkey.com/s.aspx?sm=1393qjUNii0YTYihzJHfdw_3d_3d) .**

**It will take about 10-15 minutes and you may win a \$200 Wal-Mart gift card!**

Dear Novice Teacher,

I am a doctoral student conducting my dissertation study under the direction of Dr. Tammie Causey-Konate', an associate professor in the Department of Educational Leadership, Counseling, and Foundations at the University of New Orleans. The title of my dissertation study is *Perceptions and Concerns of Novice Secondary School Teachers*.

I am requesting your assistance by participating in an online survey, which will take approximately 10 minutes. Your participation in this study is completely voluntary. You can withdraw from the survey at any time without penalty.

At the end of the survey, you have an option to enter a drawing for a \$200 Wal-Mart gift card. Your responses cannot be linked to your name should you enter the drawing.

The link to the survey is

**[https://www.surveymonkey.com/s.aspx?sm=1393qjUNii0YTYihzJHfdw\\_3d\\_3d](https://www.surveymonkey.com/s.aspx?sm=1393qjUNii0YTYihzJHfdw_3d_3d)**

Thank you in advance for your participation. If you have any questions, please feel free to contact me by email [vhand@uno.edu](mailto:vhand@uno.edu)

Sincerely,

Victoria Sanderlin Hand, Doctoral Candidate  
University of New Orleans

## VITA

Victoria Sanderlin Hand is the curriculum supervisor of high school mathematics in the Calcasieu Parish School System in Lake Charles, Louisiana. A 1972 graduate of the American School in London, England, she has a B.S. in Educational Psychology with minor areas of concentration and teaching certification in science and mathematics education. Additionally, she has a M.Ed. in Secondary Science Education. As a graduate student, she co-authored an article for publication in a peer-reviewed journal, on her work with paralarval cephalopods (Vecchione & Hand, 1989). Additionally, she co-authored a paper presented to the Gulf Estuarine Research Society that examined the anthropogenic influences of three bayous in Calcasieu Parish (Stubblefield, Vecchione, Hare, Felley, & Hand, 1986). Victoria went on to complete her Master's +30 with a concentration in Educational Leadership and earned certification in Supervision of Instruction and Administrative Principalship.

She began her teaching career in December, 1977 at Lake Charles High School and has worked in the public school system as a teacher of secondary science and mathematics, as a new teacher mentor and assessor, as a mathematics content coach in three at-risk secondary schools, and as a coordinator for the district's summer GEE remedial program in mathematics. Additionally, Victoria has worked as an adjunct professor at McNeese State University and taught in a private middle school where she also served as an administrator.

As an educational leader in the state, Victoria is a member of the National Council of Teachers of Mathematics, National Council of Supervisors of Mathematics, Louisiana Teachers of Mathematics (LATM), Louisiana Council of Supervisors of Mathematics, and the Southwest Louisiana Teachers of Mathematics (SWLTM). She has served as Vice-President for High



Schools for SWLTM and currently serves as the President. Additionally, Victoria serves on the Executive Council of LATM as the membership chairman.

Victoria is also an accomplished grant writer and administrator. As a classroom teacher, she received three competitive 8(g) awards for \$100,000 each. The grant, **Computer Calculations: Making Mathematics Meaningful and Motivational (C<sup>2</sup>M<sup>4</sup>)**, was applied to create and sustain the first computer lab in the district designed to support secondary mathematics instruction. She has also written and been awarded numerous Quality Science and Mathematics Awards and Drew Grants.

Throughout her 26 years in education, Victoria has received numerous honors and awards. In 1997, she was honored by LATM with the Excellence in Mathematics Teaching Award and in 1998 she represented Alfred M. Barbe High School as its Teacher of the Year. Also, in that year, she was the Runner-up, Calcasieu Parish Teacher of the Year and a Radio Shack/Tandy Outstanding Teacher. Victoria received a Certificate of Honor from the prestigious National Science Foundation's Presidential Award for Excellence in Mathematics and Science Teaching and was recognized by the Louisiana Department of Education for Outstanding Contributions to Education.

Victoria is committed to the spirit of community volunteerism and has served her community and state in various capacities. She served on the pilot team for the Louisiana Department of Education's Substance Abuse Prevention Education (SAPE) program, served as the advisor to the Calcasieu Parish Teen Leadership Council, chaired the Calcasieu Parish Arts Fest for Special Children, and served as the President, Vice-President, and Treasurer of the Parent Guild of the Bishop Noland Episcopal Day School. In 1990, she was the volunteer of the year for the Children's Museum of Lake Charles. As a classroom teacher, Victoria was the

faculty sponsor of Key Club International and led her school's efforts to be the largest contributor to the Kiwanis Club's Coats for Kids drive. Currently, Victoria serves on the board of the Literacy Council of Southwest Louisiana. Additionally, she serves God and her community as a Bible Study leader for high school youth.

Victoria is the wife of Harvey Gayle Hand and the mother of two children. Her son, Jonathan will graduate May, 2010 as a doctor of medicine from the Louisiana State University, New Orleans School of Medicine. Katherine, her daughter, is currently studying French and International Business at Louisiana State University.

#### **Peer-reviewed Presentation**

Stubblefield, C., Vecchione, M., Hare, S. G., Felley, S., & Hand, V. (1986). *Distribution of Acartia Tonsa in three bayous with different anthropogenic influences*. Paper presented at the Gulf Estuarine Research Society, Galveston, TX.

#### **Peer-reviewed Journal Article**

Vecchione, M., & Hand, V. (1989). Digestive-gland histology in paralarval squids: Cephalopoda- Loliginidae. *Fishery Bulletin*, 87, 995-1000.