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Selected demographic characteristics and social interest as predictors of teacher stress

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**SELECTED DEMOGRAPHIC CHARACTERISTICS
AND SOCIAL INTEREST AS PREDICTORS
OF TEACHER STRESS**

by

Barry J. Morales, B.A., M.A., M.A., Ed.S.

A Dissertation Presented in Partial Fulfillment
of the Requirements for the Degree
Doctor of Education in Educational Leadership

College of Education
Louisiana Tech University

May 2010

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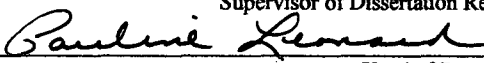
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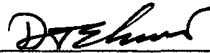
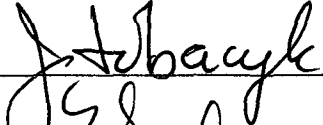
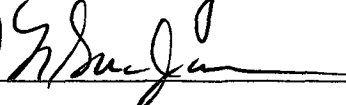

We hereby recommend that the dissertation prepared under our supervision
by Barry Joseph Morales

entitled Selected Demographic Characteristics and Social Interest as Predictors of
Teacher Stress


be accepted in partial fulfillment of the requirements for the Degree of
Doctor of Education in Educational Leadership


Supervisor of Dissertation Research

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Recommendation concurred in:

Advisory Committee

Approved: 
Director of Graduate Studies

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Dean of the Graduate School


Dean of the College

ABSTRACT

The purpose of the research was to study stress in teachers in Louisiana by utilizing a descriptive/comparative research design. Hypotheses were tested concerning relationships between each of seven independent variables and the dependent variable (teacher stress). The independent variables were (a) years of teaching experience, (b) educational levels of teachers (college degrees), (c) age, (d) gender, (e) social interest, (f) geographical location (North and South Louisiana), and (g) educational levels of students taught by teachers (elementary, middle, high school). The procedure for choosing the participants involved a sample of convenience whereby superintendents provided access/permission to specific schools. Nine schools (three elementary, three middle, and three high schools) were chosen from each of the two geographical locations in Louisiana (North and South).

The stress assessment instrument used in this study was the *Teacher Stress Inventory* (TSI; Fimian, 1985). The social interest instrument used was the *Social Interest Scale* (Crandall, 1975). A demographic sheet collected self-reported data including (a) age, (b) educational levels of teachers (college degrees), (c) years of teaching experience, (d) gender, (e) educational levels taught by teachers (elementary, middle, high school), and geographical location (North and South Louisiana). Participants were 423 public school teachers. Participants ranged in age from 22-70 years. Those who reported gender totaled 418 (men=58, women=360). Two hundred

and eighteen participants were from South Louisiana, whereas 204 were from North Louisiana.

None of the seven independent variables showed significant relationships with TSI stress scores. However, additional factor analyses of the TSI obtained five subscales that warranted further study. The five subscales were labeled (a) classroom management, (b) job recognition/status/respect, (c) workload overload, (d) time management concerns, and (e) psychological/physiological concerns. Significant differences were found in stress, as measured by the classroom management subscale on the TSI and years of experience, age, and educational levels taught by teachers. Significant differences were found in stress, as measured by the job recognition/status/respect subscale of the TSI and educational levels taught by teachers and the educational levels of teachers (type of college degrees). A significant difference was found in stress, as measured by the workload overload subscale of the TSI and educational levels taught by teachers. Significant differences were found in stress, as measured by the time management concerns subscale of the TSI and age and gender. A significant difference was found for gender on the TSI subscale psychological/physiological concerns. Implications of these findings were discussed.

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Author Barry J. Morale
Date May 14, 2010

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This dissertation is dedicated to my mom, Betty, and dad, Joseph, who provided me the courage and fortitude to take the leap to complete this endeavor. Their love and support are with me forever.

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CHAPTER 1

INTRODUCTION

In the American classroom today, it is easy for a teacher to become overwhelmed and stressed. Leaving the profession early in one's career is a common occurrence. The emphasis on testing and standards as a result of the *No Child Left Behind* Act, family responsibilities, the need to pursue education continuously, low salaries, and poor working conditions have been cited as reasons (Botwinik, 2007). "Teachers who won't teach are symptoms of an ailing educational system. In fundamental ways, the U. S. educational system is structured to guarantee the failure of teachers," according to McLaughlin, Pfeifer, Swanson-Owens, & Yee (1986, p. 420). Researchers have found that stress is actually a way of life for teachers whereby they describe their situations as overwhelming, anxious, apprehensive, and all-consuming because of the mounting needs of the students and the relentless series of testing needed (Black, 2003).

Stress, according to some researchers, is biological in nature; "chronic or extreme stress can trigger release of too much cortisol, which destroys brain cells in the hippocampus, resulting in short-term memory impairment, rapid weight gain, irritability, and other mood problems, high blood pressure, and fatigue" (Black, 2003, p. 29).

There are a number of sources of stress for elementary and secondary teachers. Kyriacou (2001) indicated four common sources of stress as:

1. Students who lack academic motivation
2. Discipline issues in the classroom
3. Time pressures
4. Heavy workloads

Dunham (1986) reported four major areas of concern as reported by teachers to be the following:

1. Educational change: reorganization and too many innovations in the curriculum and in teaching methods
2. Problem pupils: lack of interest, inattention, apathy, lack of effort and concentration, hostility, lack of cooperation, disruption
3. Poor working conditions: large size schools and classes and high noise levels, poor staff communication and cooperation
4. Role conflict and role confusion: an increasing number of often conflicting expectations placed on teachers. (p. 89)

Two other areas that can dramatically affect the stress levels of teachers are (a) expectations of teachers, such as classroom management and resources available, and (b) financing available to aid in the educational atmosphere of the school setting. Winefield and Jarrett (2001) have researched such evidence that can be associated with increased pressures put on teachers. Those findings include the movement toward increased accountability and lack of financial support available to school systems. For example, McLaughlin, et al., (1986) stated that “without the necessary tools, teachers are handicapped” (p. 423). Nearly half the teachers interviewed and researched by

McLaughlin (1986), et al., found that teachers rated their school supplies and teaching materials as poor or barely adequate.

Organizational and environmental factors are also instrumental when affecting the levels of stress surrounding teachers. For example, work overload can occur when too much is expected, but inadequate time is allowed to complete a particular project; another instance could be role conflict, which can be a result of seemingly unrealistic demands (Brewer & Clippard, 2002). Impersonal and rigid work environments are other contributing factors to the development of stress among teachers, according to findings by Cordes and Dougherty (1993). Additionally, Colgan (2003) found frustrations that can also be stressors on teachers, including: (a) expectations, (b) time constraints, (c) financial constraints, and (d) personnel.

Kyriacou (2001) defined teacher stress as unpleasant and negative emotions that teachers deal with as a result from some aspect of their role as teacher. Hansen and Sullivan (2003) discussed three major components of stress that produce such distressing experiences: (a) the stressor-events or occurrences taking place in one's work place, such as student misbehavior; (b) the strain-the physiological and psychological effect of stressors, such as the tensing of the muscles when frustration or anger occur; and (c) the appraisal-which can be an influence on an individual's reactions to stressors. By removing such stressors, one can more adequately deal with challenging work environments, for "appraisal involves judgments about the degree of threat a stressor presents and an evaluation of whether sufficient resources are available to cope with the stressor" (Hansen & Sullivan, 2003, p. 612).

Statement of the Problem

The basic problem in this study is to empirically test whether there are relationships between seven predictor (independent) variables of age, gender, years of teaching experience, educational level of teachers (college degrees), educational levels taught (elementary, middle, high school), social interest, geographical location (North or South Louisiana), and the outcome (dependent) variable of stress. “High levels of prolonged stress are harmful to the health and well-being of individual teachers, their students, and the functioning of the entire school” (Hansen & Sullivan, 2003, p. 613). Many teachers, especially young educators with little or no experience, are finding that the teaching profession is so stressful and working conditions are so distressing that they are not staying in the field for any long period of time, thus causing a shortage of teachers available in the profession. Working environments and deteriorating conditions and atmospheres have led to increased levels of occupational stress, resulting in health problems, family difficulties, and job dissatisfaction, to name a few (Black, 2003).

Justification of the Study

The justification of this study is to lead one to find a greater understanding and knowledge base in order to create positive interventions in dealing with stress. Such findings can lead to improvements in teacher job performance, teacher job satisfaction, and improved teacher morale. Attempts were made to determine the predictor variables associated with teacher stress levels in various settings in six school districts in Louisiana, three in North Louisiana and three in South Louisiana. Characteristics conducive to creating stressful conditions within educational settings were reviewed and studied for clarification and understanding. Collaborative and comprehensive policies and

approaches were discussed, reviewed, and possibly put into practice in order to make stressful environmental conditions more manageable for those educators who are under such effects. Solutions were reviewed so that a positive, more conducive atmosphere for change can take place for growth and development of teachers. Coping mechanisms and administrative support programs and approaches were also evaluated so that innovative methods can be established to make such intense, challenging surroundings more palatable for all teachers, especially the young and first year teachers. Such research can go a long way in addressing those areas of stress so that those who enter the profession will be more likely to succeed and stay in the profession. Once one understands and comprehends the complexities of the teaching profession and the environment that exists, much can be done to restructure the teaching profession in such a manner as to make it more successful, manageable, and rewarding for all who are part of it.

Teachers leaving the profession will continue to become an issue of concern for today's educational administrators and school boards across the country. The exodus of educators leaving the teaching career and the shortage of qualified replacements has already been seen. School districts scramble to find the best qualified personnel to fill the growing numbers of openings, for teachers "need a support system to help reduce their vulnerabilities to stress. Why? One-third of today's teachers would choose another career if they could start over again" (Reglin & Reitzammer, 2000, p. 594). This type of mass exodus and shortage of qualified personnel can be attributed to the stressful situations and environments in which they are under.

Theoretical Framework

The theoretical framework for this study was based on Alfred Adler's theory, called individual psychology. Adler's theory of individual psychology emphasizes that effects of demographic variables, such as age and gender, educational variables, occupational variables, societal variables, and psychological variables, can effect ones individual adjustment. Because Adler proposes a comprehensive theoretical framework from which to understand teacher job stress, it was selected as the model to guide this research study. According to Crandall (1984), social interest "involves an interest in and concern for others" and "(T)he general theme is that social interest, although it may sound rather mamby-pamby to some, is important because it contributes strength to the individual who has it" (p. 164-5). Crandall further stated that it is "Adler's contention that social interest is important in coping with problems" (p. 488). Also, "social interest was found to be positively associated with the ability to cope with stress in studies of tolerance for loud noise and stability of self-appraisal following failure...and that social interest is an important contributor to the well-being of an individual," as stated by Crandall (1980, p. 492).

Stress and the variables of age, gender, educational level (college degrees), years of teaching experience, geographical location (North and South Louisiana), and type of school (elementary, middle, high school) were studied utilizing the *Teacher Stress Inventory* (TSI). Social interest theory was a central part of the theoretical framework, because "social interest becomes Adler's criterion for mental health," Ansbacher (1991, p. 29) – and stress is a significant factor in mental health. Also, according to Crandall (1984), "social interest acts in a causal manner to promote adjustment" (p. 171).

Hypotheses/Research Questions

The research questions for this study are:

1. Do teachers of varying levels of years of teaching experience differ in levels of stress?
2. Do teachers of varying educational levels (college degrees) differ in levels of stress?
3. Do teachers of varying levels of age differ on levels of stress?
4. Do teachers of different genders differ on levels of stress?
5. Do teachers of varying levels of social interest differ on levels of stress?
6. Do teachers in various geographical locations (North and South Louisiana) differ on levels of stress?
7. Do teachers of different educational levels taught (elementary, middle, high school) differ on levels of stress?

The research hypotheses (RH) for this study are as follows:

1. There is a significant difference between varying levels of years of teaching experience and stress levels.
2. There is a significant difference between varying educational levels of teachers (college degrees) and stress levels.
3. There is a significant difference between varying levels of age and stress levels.
4. There is a significant difference between different genders and stress levels.
5. There is a significant difference in stress level of teachers reporting high and low levels of social interest.

6. There is a significant difference between geographical location (North and South Louisiana) and stress levels.

7. There is a significant difference between different educational levels of students taught by teachers (elementary, middle, high school) and stress levels.

The following states the null hypotheses (H):

1. There is no significant difference between varying levels of years of teaching experience and stress levels.

2. There is no significant difference between varying educational levels of teachers (college degrees) and stress levels.

3. There is no significant difference between varying levels of age and stress levels.

4. There is no significant difference between different genders and stress levels.

5. There is no significant difference in stress level of teachers reporting high and low levels of social interest.

6. There is no significant difference between geographical location (North and South Louisiana) and stress levels.

7. There is no significant difference between different educational levels of students taught by teachers (elementary, middle, high school) and stress levels.

The purpose of the study was to study the effects of stress on teachers and to study the relationships between the independent variables of years of teaching experience, age, gender, social interest, educational level taught (elementary, middle, high school), geography (North and South Louisiana), and educational level attained (college degrees), and the dependent variable of stress. The *Teacher Stress Inventory*

(TSI) (Fimian, 1985) was selected as the measure of stress, and the *Social Interest Scale* (SIS) (Crandall, 1975) was chosen to measure social interest.

Rationale for Hypotheses

The researcher chose seven independent variables (years of teaching experience, educational level attained, age, gender, social interest, geographical locations, and educational level taught) with the expectation of finding differences when comparing them in relation to the dependent variable of stress. The rationale for the stated research hypotheses concerning each of the independent variables follows.

One may reasonably expect teachers with more years of teaching experience to have lower levels of stress as compared to those teachers with only a few years of experience. This is because with greater years of teaching experience, teachers presumably would become more adept at handling student classroom behaviors and become better at classroom management. As for varying educational levels of teachers attained (college degrees), the researcher reasoned that the more education one has attained in the form of college degrees, the less stress one would expect. "Knowledge is power" is a famous saying, so one may think that the more degrees one has received, the less stress one would experience. One way to address the area of educational levels revolves around the area of developing strong teacher education programs and the first years of teaching. For instance, research done by Liston, Whitcomb, and Borko (2006) indicate that new teachers feel that the theoretical framework of what was learned in their teacher education programs did not properly prepare them for the demands of the classroom. Young, first year teachers lacking the depth of experience and knowledge that veteran teachers have need more organization to support their learning.

Age was another variable chosen by the researcher with the expectation of finding older teachers less stressed than younger teachers. Two such reasons for this Research Hypothesis were that greater age is often associated with greater years of experience, and the development of more extensive social support networks, such as family, neighborhood, and community organizations, often lead to less stressful situations and job issues. Role conflict and overload may be more easily managed by older teachers, as well.

As far as gender is concerned, the researcher hypothesized that males and females would differ in the way they handled stress. Females may experience less stress when working in more controlled environments with more administrative support. Males would possibly experience different stress levels depending on work or role overload or unclear guidelines or structures within the school setting. Brewer and McMahan (2003) identified gender as one variable that does affect stress levels of teachers.

The researcher hypothesized that social interest would be a factor in relation to stress. Social interest could be a major factor in the manner in which teachers deal with pupil misbehavior or school discipline policies, for instance. Social interest could also be highly associated with more social support networks, as well. For example, those teachers with more social interest would tend to be more socially adept to working with parents of difficult students or more likely to be involved in the lives of their students, which would make for less stressful situations. As stated by Crandall (1984), "it appears that social interest provides some degree of immunity to the effects of stress" (p. 172).

Also, geographical locations (North and South Louisiana) of teachers may contribute to differing levels of stress. The researcher has hypothesized that teachers in

South Louisiana would experience more stress than those teachers in North Louisiana for a number of reasons, such as the profoundly disruptive effects of Hurricanes Katrina and Rita and the residual affects associated with these occurrences. With so many school settings and environments in disarray after the devastations of the hurricanes, one could expect more stress in the southern part of the state.

Finally, the researcher hypothesized that different educational levels of students taught by teachers (elementary, middle, high school) would be associated with different levels of stress. Middle school teachers, for example, may experience different stress levels as compared to elementary school teachers because of the student population. Middle school students are experiencing various psycho-social and biological changes that presumably would create more classroom disruptions or management issues for teachers.

Definitions of Terms

A list of terms and definitions related to this study is included below to aid the reader and to allow him/her to better understand its meanings.

Burnout: Represents a state of exhaustion that results from working very intensely and without concern for one's own needs (Freudenberger, 1973).

It is also an "extreme state of psychological strain resulting from a prolonged response to chronic job stressors that exceed an individual's resources to cope with them," as stated by Landy & Conte (2007, p. 428).

Depersonalization: Is the frequency in which one is callous towards people, the way one treats people, manner in which the job changes one emotionally, and the care one has for others (Maslach & Jackson, 1986).

Direct Action: Involves approaches that teachers themselves can do to eliminate or deal with the stress of their professions (Kyriacou 2001).

Emotional Exhaustion: Occurs when one is emotionally drained, used up, fatigued, frustrated, burned out, and stressed with working with people directly (Maslach & Jackson, 1986).

Job Stress/stressors: Physical or psychological demands to which an individual responds (Landy & Conte, 2007). It can be a consequence of two kinds of mismatch: (a) a mismatch between the requirements of the job and the ability of the worker to meet those requirements, and (b) a mismatch between the worker's expectations of what the job involves and what it actually involves (French, Caplan, & van Harrison, 1982).

Palliative Action: Does not directly deal with the stress itself, but is aimed at providing ways to lessen the stress levels (Kyriacou 2001).

Personal Accomplishment: Is the way one understands others, the manner in which he deals with problems, the positive and negative affects of his influences, and the degrees to which ones jobs and collegial relationships are worthwhile and exhilarating (Maslach & Jackson, 1986).

Role Conflict: Can result in burnout as demands come into conflict with one or more demands placed on the person (Brewer & Clippard, 2002).

Social Interest: Is the valuing of things other than oneself. It is based on ones capacity to transcend the limits of ones self and to identify with the needs and concerns of others (Crandall, 1978). "It involves an interest in and concern for

others” (Crandall, 1984, p. 164-5). It will be operationalized by scores on the Social Interest Scale (Crandall, 1984).

Stressor: Occurs when one does not feel he has the mental or physical ability to meet adequately a demand, thus a discrepancy exists and the demand is perceived to be a stressor (Brimm, 2001).

Teacher Stress: Is “the experience by a teacher of unpleasant, negative emotions, such as anger, anxiety, tension, frustration, or depression, resulting from some aspect of their work as a teacher” (Kyriacou, 2001, p. 28). It is assessed here by scores on the Teacher Stress Inventory (Fimian & Fasteneau, 1990).

Teacher Stress Inventory (TSI): Is an inventory measure used by teachers to assess their stress levels. It consists of 49 items, utilizing a Likert-type measure ranging from 1 (no strength; not noticeable) to 5 (major strength; extremely noticeable). It is composed of ten factors, which include professional investment, behavioral manifestations, time management, discipline and motivation, emotional manifestations, work-related stressors, gastronomical manifestations, cardiovascular manifestations, fatigue manifestations, and professional distress (Fimian & Fasteneau, 1990).

Work Overload: Occurs when there are too many demands and expectations put on an employee but not enough time is given to meet them (Brewer & Clippard, 2002).

CHAPTER 2

LITERATURE REVIEW

“Would you like a job with short hours, long vacations, and decent pay? If so, consider a teaching job. This misconception is largely the public’s perception of teaching” (Botwinik, 2007, p. 271). Each year brings added stress to educators, such as federal and state guidelines, modified textbooks, and ever-changing schedules; however, “for brand new teachers, the stress level is even higher than for returning teachers, as they are doing everything for the first time” (Godt, 2006, p. 58).

The above concerns even existed decades ago. As Bardo (1979) stated 30 years ago, regardless of the fact that birthrates are falling and enrollments in schools continue to decline, tenured public school teachers may not only have the safest jobs in America, they may also have the most enviable. Although it is true that salaries have not kept up with inflation and working conditions are not up to par with idealism, liberal fringe benefits, such as frequent vacations and short working days, combine with tremendous job security to make teaching a career many people consider as near perfect.

Dworkin (1987) also found over two decades ago that some urban areas were spending a major part of their resources in an attempt to reduce the level of teacher stress and teacher turnover. For example, some large school districts spent six to ten million dollars each year to create programs and incentives that curb the turnover rate among teachers. Though much of these allocations are considered to be extravagant and

extreme, Dworkin also maintained that it is possible to create an informed and comprehensive policy on education that can reduce the negative aspects of stress associated with the teaching profession. For example, Brimm (2001) stated that:

If the individual does not feel he has the mental or physical ability to meet adequately the demand, a discrepancy exists and the demand is perceived as a stressor. Therefore, a series of unexpected parent telephone calls may generate stress for one principal, but the same calls will not be perceived as a stressor for another principal. (p. 64-5)

Occupational Stress

Vetter (1976) argued that by taking a proactive managerial approach to the problem of role pressure, one can expect better job results and reduced role stress. However, there are a number of factors that can lead to administrative stress. For example, Giammatteo and Giammatteo (1980) pointed out that it is not so much particular events that cause administrative stress, but it is one's own assignment of worth to the events that create such stress. Brimm (2001) also stated that "understanding stress will serve to raise school administrators' levels of consciousness so that they can recognize stress and actively seek to cope as (or before) stress occurs" (p. 69).

Kyriacou (2001) defined teacher stress as the following: "the experience by a teacher of unpleasant, negative emotions, such as anger, anxiety, tension, frustration, or depression, resulting from some aspect of their work as a teacher" (p. 28). Hansen and Sullivan (2003) discussed three major components of stress that are formulated to produce distressing experiences.

1. The stressor, an event or series of events that occurs in the work environment. This may include loud or disruptive students or rude and disparaging parents.
2. The strain, which encompasses both the psychological and the physiological effects of stressors on the person.
3. The appraisal component, which influences how one will react to a stressor. This particular component involves judgment about how much of a threat a stressor really is and whether or not the resources are available to deal with the stressor. How one interprets an event can influence how stressful it really is. For instance, if a teacher does not believe that he has enough energy, skill, or support to effectively deal with a particular situation, the strain will likely be greater than if one feels comfortable handling the said situation because of adequate opportunity or resources. Such stress can be adequately addressed by either treating the symptoms of strain or modifying the appraisals, or both. (p. 612)

The researchers expressed that of these three components, the strain that is expressed by teachers is the most critical factor influencing one's health, for removing or reducing stressors is the most effective manner of dealing with occupational stress.

Stress and the Working Environment

In studying Rational-Emotive Therapy (RET), Forman (1990) determined that the greatest stress factor for teachers is poor school environment, including poor teacher to administrator relationships, job insecurity, role conflict, and student apathy. Other factors that she cited included the (a) impact of teachers' stress levels including pupil misbehavior, (b) poor working conditions, (c) personal concerns, (d) relationships with

parents, (e) time pressures, and (f) inadequate training. Forman's findings also showed inexperienced teachers were much more irrational and experienced teachers were less irrational. Her findings concluded that teachers high in irrationality were found to experience much more stress in their jobs, thus preventing teachers from developing the necessary coping skills to deal with external stressors. As Forman stated, teacher stress-management interventions that tend to have the highest levels of effectiveness contain components that address cognitive control.

Psychological Distress

Tuettemann and Punch (1992) identified five stressors leading to teacher's experiencing psychological distress:

1. Adequacy of access to facilities
2. Frequency of student misbehavior
3. Excessive societal expectations
4. Intrusion of school work into out-of-hours time
5. Total-workload. (p. 45)

As the researchers concluded, these factors all correlate positively with teacher distress; thus, the more teachers perceive that they have inadequate access to facilities, frequent misbehavior of students, unrealistic societal expectations, or too much intrusion of school work on personal time, the more likely it is that they experience psychological distress. Abel and Sewell (1999) concluded that greater levels of stress occurred from pupil misbehavior and constant time pressures, which was even greater than the stress received from poor working conditions and poor staff relationships. Findings were consistent for both rural and urban educational settings. Winfield and Jarrett (2001)

supported the idea that decreased funding and increased accountability have resulted in continued increases in pressures put on academicians, both at the faculty level and the administrative level. French, et al., (1982) concluded the following about job stress:

Job stress can be a consequence of two kinds of mismatch: a mismatch between the requirements of the job and the ability of the worker to meet those requirements, and a mismatch between the worker's expectations of what the job involves and what it actually involves. The changing nature of academic work suggests that both kinds of mismatch may be increasing for those academics who entered the profession some time ago. On the other hand, younger academics may find that the new job demands fit their expectations and entrepreneurial skills and may choose to enter a profession that recognizes and rewards them. If this is so, then we might expect to find an increasing difference in stress levels between older academics and those recruited in more recent times. (p. 57)

Disillusionment and Depression of the Teaching Profession

Teaching environments are important to determining the levels of stress that are exacted on educators. "Not only does teacher stress affect teachers' general attitude toward teaching, but also it is likely to influence the quality of their relationships with students" (Yoon, 2002, p. 491). Weissbourd (2003) concluded that "disillusionment and depression undermine large numbers of teachers in urban schools" (p. 9). Teachers possess a litany of stresses, such as (a) feeling stranded, (b) feeling marooned in their classrooms, (c) lacking adequate administrative support, (d) becoming overwhelmed, or (e) feeling that they lack the skills necessary to work effectively with particular

students. Behavioral problems in urban schools also play a role in the stress levels of teachers. For example, according to Peterson, Maier, and Seligman (1993), a sense of learned helplessness, which is a gradual sense of losing control, continues to be a burden for those in such difficult situations.

McLoyd (1990) remarked that those adults who experience depression often become unilateral and commanding in their interactions with others; they can become withdrawn, irritable, critical, and downright hostile; they are easily governed by their moods rather than by their awareness, and often take the path of least resistance by doing the least required of them. According to Weissbourd (2003), the burden of teachers having to manage difficult students in varying stressful environments has caused many fine educators to express such disbelief and disillusionment as to make them question their own abilities to effectively make a positive difference in their students' lives. However, Iacovides, Fountoulakis, Kaprinis, and Kaprinis (2003) suggested that:

The more the person believes he/she has control over events, the less stress he/she experiences. This is characteristic of the Type A personality or behaviour pattern, characterized by competition, speed and high energy. This same personality, however, is reported to correlate highly with burnout. It is expressed fully only in situations such as stressful work that demands and even encourages it. (p. 216)

Hence, another continuing program often discussed as a solution to such disillusionment and depression is that of mentoring projects to aid new teachers in the

process of adjusting to their professions. Weissbourd (2003) found that mentoring programs can be influential on a variety of levels:

1. Mentors can assist teachers in becoming more competent with their own talents.
2. Mentors can help aid new teachers in being realistic and taking pride in what may seem small accomplishments.
3. Mentors can help teachers be more creative about their career paths, thus possibly leading to ways that would assist them in being more effective with their students.
4. Teachers also need to become more innovative by starting their own programs, by doing more research and assuming more leadership roles.

Teachers who are guided by coaches can gain insight into such topics as earning respect and trust, creating caring communities, dealing with difficult students, and creating positive environments for growth (p. 11).

School systems are having to deal with the dilemma of burned out educators.

Colgan (2003) described burnout as an “accumulation of things that start to snowball, leaving you with a growing feeling of helplessness, a fear that the tasks are insurmountable. You believe that no matter what happens, you can’t win” (p. 24).

Principals and other administrators, as well as central office personnel and school board members, are struggling to fill positions from those educators who leave because of feelings experienced from stress. Katheryn Gemberling, deputy superintendent for nearly eight years in Montgomery County, Maryland, stated that there are ways to fight the problem of stress that teachers experience. She indicated that her colleagues in the

profession maintained their success levels by finding ways to reinvent themselves because job situations do alter over time (Colgan, 2003).

Self-concept can also play a role in one's approach to dealing with stress. As Villa and Calvete (2001) suggested, "The role of self-concept mediation in the relationship between teachers and their environment suggests that an improvement in self-concept can serve as an important means of intervention in the prevention and reduction of stress in teachers" (p. 250). For instance, the role of administrators has changed, as testing requirements have been added and societal expectations have become greater; training needs to be more practical in nature and more focused by providing growth and development opportunities for administrators. Because principals often feel overwhelmed, they struggle to maintain the focus needed to sustain high-quality schools (Colgan, 2003).

Stress and the Complexities of Teaching

Naylor (2001) discussed three facets that affect educators. First, the difficulty and complexity of teaching and relating to students can first be attributed to a changing class composition and the integration of ESL (English as a second language) students and students with special needs into the composition of regular classrooms. Such composition of students makes teaching more difficult and stressful "because a range of pedagogical and organizational approaches are necessary in addition to those used to teach the non-ESL/special needs students" (p. 7). Because extra training and support are often required to handle the changing classroom compositions and monies are not always available to pay for such support systems, more pressures and stress levels are placed on educators. Second, students who live in poverty or unstable home lives are a

growing concern for teachers today. Educators have continued to express concerns for those living in such environments because they fear that certain conditions can reduce the chances of success for these particular students. Third, there are the students whom many feel are reluctant to be in school in the first place. Students with behavioral problems or apathetic students fall into this facet of concern by educators, because they tend to increase the stress levels between teachers and students.

Naylor continued to discuss stressful workplace situations by discussing five aspects that lead one to be in stressful situations. First, the volume of the work load is a major issue affecting teachers. Second, the range and complexity of teachers' work is another growing factor. Such demands include (a) the amount of meetings required to attend, (b) paperwork, (c) increased testing requirements, (d) duties and extracurricular activities, and (e) the purchasing of classroom materials out of their own pockets. Third, seasonal pressures such as quarterly, midterm, and final grades, in addition to regular workloads, add to the stress levels of teachers. A fourth area revolves around the changes made in curriculums. Such changes are also affecting stress levels. Lastly, expectations continue to be mentioned in the literature as stressors that are difficult to meet. Such stressors come from the federal government, colleagues, students, parents, and the community, to name a few.

Among the ways of achieving an alleviation of stress is to provide programs and initiatives that break down rigid barriers that exist in the hierarchical structures of school systems, promoting more democratic and collaborative efforts among colleagues in each school, and establishing atmospheres that help to ingrain a greater sense of achievement and awareness by those teachers in the system (Carr, 2003). Carr also

stated the importance of teamwork and trust that can go a long way in determining whether a school is able to accomplish its goals and missions effectively.

Administrators can be important resources when it comes to making a difference in decreasing the levels of stress experienced by teachers. Stress interventions, according to Murphy and Sauter (2003), are means that administrators can utilize in their everyday school settings, such as: (a) interventions that can aid in the elimination or reduction of worker stress; (b) techniques to involve the use of meditation, stress management training, and muscle relaxation programs; or (c) other tools available to administrators like the use of seminars or training workshops to maximize the potential of each teacher. Providing rewarding but challenging work atmospheres is also crucial to achieving higher levels of performance and self-satisfaction.

Administrators must also find ways to deal with situations that may lead to various stress levels, thus causing a high level of stress and job tension. Brimm (2001) discussed psychological stress, including lower job satisfaction and dysfunctional behavior, as often occurring to administrators:

Principals experience either role conflict, where differences exist among groups regarding appropriate principalship behavior; or role overload, where an administrator realizes there is insufficient time and energy to do all that is expected; or role competence, where a leader acknowledges the lack of sufficient expertise or leadership flexibility to meet particular demands. (p. 68)

Administrators and Stress

Administrators can play a major role in alleviating some of the stress that teachers experience. For instance, Carr (2003) stated that teamwork and trust are

important factors in determining whether a school district will not only reach its goals but also achieve its mission when it comes to educating all learners. She continued by stating that "many researchers believe the real issue isn't that educators and board members aren't well prepared to fulfill their leadership roles, but that the demands of the profession are increasing at exponential rates" (Carr, 2003, p. 20). Also, researchers note that administrators could distribute work loads more equitably in order to relieve tension and stress, to encourage a sense of fulfillment, and to reduce the amount of work to more manageable levels (Sarros & Sarros, 1987).

Other means of dealing with stress could be through stress interventions. Murphy and Sauter (2003) used the term stress intervention in a broad sense to include efforts to eliminate or reduce the sources of stress at work, as well as efforts to help workers cope with stress or at least reduce the effects of stress on worker health and safety. Such forms of stress interventions, they suggest, involve stress management training techniques, such as meditation, biofeedback, skills training, and muscle relaxation techniques. Other worksite programs can also be identified to be influential and vital to reducing worker stress. For instance, the researchers suggest that stress management workshops, conflict resolution training, and time management seminars are some examples of programs that can aid in developing more productive work place environments; also, programs based on balances between work and life, as well as family-friendly initiatives, could be instigated in work place settings to make the job more of a welcoming place.

Administrators can also take a number of other initiatives to alleviate stress among teachers. For instance, providing teachers with more opportunities to use their

abilities and qualifications can go a long way in developing a more challenging and rewarding work atmosphere; likewise, increased positive feedback and reinforcement could do wonders in expanding feelings of personal achievement (Sarros & Sarros, 1987). As Sarros and Sarros (1992) stated in a later study:

A common sense view suggests that, in everyday life, people who have a strong social support system are both psychologically and physiologically healthier and less prone to stress and burnout than those without benefits of some form of social support... (and) the research evidence however is clear on one point; support from supervisors such as school principals can help alleviate educator burnout. (p. 56-57)

Teaching is a profession that requires tremendous amounts of work and commitment. Nisbet (1999) stated the following:

Teaching is a demanding profession that requires great commitment. To do the job well, teachers must expend a great amount of physical, emotional, and spiritual energy. Committed teachers spend many hours of preparation to have the perfect lesson. They pour their hearts and souls into their work. Yet despite the importance of their job, the teacher is under appreciated. They are paid too little and do not get the pat on the back they deserve. They toil away in one of the most stressful environments. Crowded classrooms and increasing discipline problems make it more difficult for them to do their job. They often feel like failures who are emotionally spent and lack the energy and commitment that they once had. They succumb to teacher burnout. (p. 531)

Burnout

Some stressful situations lead educators to another level of concern, that being “burnout.” According to Byrne (1994), burnout describes health care workers who are physically and psychologically burnt out and is now commonly associated with teachers and other human services professionals. Freudenberger's (1973) approach reflects a clinical perspective that deals with etiology, symptoms, clinical course, and recommended treatment; it represents a state of exhaustion that results from working very intensely and without concern for one's own needs; it is a syndrome that characterizes those who have an enormous personal desire to help others.

In particular, burnout can result in “mental and health problems, deterioration of social and family relationships, higher levels of job dissatisfaction, somatic complaints and the intention to leave the profession,” according to Oplatka (2002, p. 214). Cherniss (1980) maintained that when one experiences psychological withdrawal, a main consequence of burnout, a number of consequences occur, including: (a) decreased levels of job and career commitment; (b) turnover intentions, and (c) actual turnover, itself.

Maslach and Jackson (1984, 1986) specified burnout as a three-faceted construct with personal accomplishment, depersonalization, and emotional exhaustion, which holds a central position because it is considered to be more responsive to stressors in a teacher's work environment. Taken from Maslach's Burnout Inventory (Maslach & Jackson, 1986) the terms of emotional exhaustion, depersonalization, and personal accomplishment were studied to assess the frequency and intensity of teacher burnout. Teachers responded to emotional exhaustion by citing the frequency in which they felt

(a) emotionally drained, (b) used up, (c) fatigued, (d) frustrated, (e) burned out, and (f) stressed with working with people directly. Teachers responded to the category of depersonalization by (a) the frequency in which they were callous towards people, (b) the way they treated people, (c) the manner in which the job changed them emotionally, and (d) the care they had for others were also studied. Teachers responded to the category of personal accomplishment by (a) the way they understood others, (b) the manner in which they dealt with problems, (c) the positive and negative affects of their influences, and (d) the degrees to which their jobs and collegial relationships were worthwhile and exhilarating were also examined.

Anderson and Iwanicki (1984) stated that in order for educators to avoid the feelings of emotional exhaustion, depersonalization, and reduced personal accomplishment, a number of things must occur, including (a) developing themselves and reaching their potentials, (b) deriving satisfaction from the job, and (c) having professional success. The daily work environment without the benefits of a varied work load may also account for these differences in burnout among educators according to Sarros and Sarros (1987). In particular, the researchers found that “both depersonalization and personal accomplishment burnout appear to be more responsive to the motivational needs of teachers to be challenged and rewarded for their work. On the other hand, emotional exhaustion burnout is more the consequence of work load, which is often related to work stress” (1987, p. 227).

Even more current findings indicate that teachers were experiencing more personal accomplishment burnout than other helping professionals, such as police and psychologists; the common element between these groups was there intense and

personalized contact with people (Brewer & Clippard, 2002). The researcher also noted that job burnout has been associated with a number of mental and physical ailments, including (a) physical exhaustion, (b) insomnia, (c) family problems, (d) depression, (e) abuse of alcohol and drugs, (f) anxiety, (g) headaches, (h) backaches, and (i) gastric-intestinal problems.

Variables Associated With Burnout

Nisbet (1999) indicates that teachers who are stressed out sometimes succumb to burnout. Maslach, Jackson, and Leiter (1996) found that burnout is a result of an overload of demands and expectations, as well as a lack of coping resources. Such variables associated with burnout fall into the following three categories: (a) environmental and organizational factors, (b) personality factors, and (c) demographic characteristics. Work overload occurs when there are too many demands and expectations put on an employee but not enough time is given to meet them; also, those employees who have constant, direct, and lengthy contacts with clients tend to have increased levels of burnout (Brewer & Clippard, 2002). Role conflict can also result in burnout as demands come into conflict with one or more demands placed on the person, as supported by the same researchers.

Cordes and Dougherty (1993) also concluded that employees who work in very impersonal, bureaucratic, rigid work environments tend to experience even higher levels of burnout, as well as those individuals who felt isolated or disconnected to the decision making in the organization. It is argued that the characteristics of the work environment are more of an important element in causing burnout than individual circumstances; these organizational characteristics, including (a) workload, (b) supervisor/peer support,

(c) internal conflict, and (d) participation in the decision-making process, have all been found to be related to the causes of burnout, as cited by Belicki and Woolcott (1996).

Burnout can be linked to personality factors, as well. Educators tend to have certain personality traits that can lead them to have burnout. For example, Burke and Richardsen (1996) found that idealistic employees were more likely to experience burnout, as well as those who were (a) sensitive, (b) empathic, or (c) overly enthusiastic. Brewer and Clippard (2002) also concluded other supporting evidence that leads one to link personality factors to burnout. Others, such as Layman and Guyden (1997), concluded that introverted people were more at risk of experiencing burnout than those considered extroverts because they tend to be more bothered by overload, had more difficulty speaking up at meetings, and experienced more resistance to change in the workplace.

Educational level was also studied and shown to be a factor in burnout. For instance, Marinelli (1992) concluded that a direct link existed between job satisfaction and burnout when the amount of education was considered. Belicki and Woolcott (1996) have found that the following helped in reducing emotional exhaustion and increased job satisfaction: (a) having respect from others, (b) having an acceptable likable work schedule, (c) having a voice in the work environment to get changes made, and (d) having their opinions sought out.

Other factors were found to be reasons for burnout. Lutz and Maddirala's (1990) five major findings included:

1. Teachers experienced considerable emotional exhaustion, and the paperwork burden accounted for 28% of that burnout.

2. Due to reform policies, teachers felt they no longer had control over their professional lives.
3. Teachers did not feel that state-level efforts to reduce paperwork had been successful, but they felt that it was within the power of the principal to do so.
4. Nine percent of burnout was attributed to state mandated tests.
5. The more teachers resented or were frustrated by state mandated tests, the more they taught to it (p. 20-21).

Role Conflict

Such high-strain jobs can lead teachers and educators into role conflict, which results from conflicting demands and expectations that cause stress for the person when he or she makes attempts to satisfy those highly conflictive demands, according to research by Van Sell, Brief, and Schuler (1981). According to Black (2003), work-related stress can also be both physically and psychologically demanding and harmful to educators; for example, the physical effects can include a number of harmful pressures, such as headaches, fatigue, ulcers, and insomnia. Psychologically, such demands can lead to uncontrollable outburst, depression, anxiety, tension, indecisiveness, and constant bouts of worry and confusion; panic attacks and feelings of inadequacy are also mentioned as occurrences that take drastic tolls on one's being and job performance.

There are some helpful ways of reducing role conflict among educators, for positive working conditions are good predictors of low stress (Nelson, 2001). Those educators who feel more positive about teaching are more likely to tolerate more

stressors early in their careers (Wilhelm, Dewhurst-Savellis, & Parker, 2000). Mearns and Cain (2003) found that:

Independent of how people actually cope with stressful events, having a strong belief that they can cope makes people less vulnerable to the negative consequences of distress. Believing you can regulate your negative mood makes you feel better, even if you make no attempt to improve your mood. (p. 79)

Also, providing increased control over teacher workload is one such way of helping them reduce stress and role conflict. Stress can be reduced by lowering demands or if additional persons are brought together to share responsibilities and demands of given tasks; it is important to be cognizant of the fact that increasing demands on teachers without giving them more autonomy is extremely likely to bring about higher levels of stress (Hansen & Sullivan, 2003).

Reducing Stress Levels

Murphy and Sauter (2003) declared that certain key developments must take place before stress levels can be effectively reduced:

1. Organizations need a good deal more information from the research community to support the rationale for and design of stress intervention.
2. Organizations need to be offered a great deal more evidence that stress interventions will in fact produce reductions in worker distress and improvements in worker well-being.
3. Authoritative guidelines on how to design, implement, and evaluate stress interventions are desperately needed.

4. Stress interventions would benefit from a broader conceptual perspective, one that does not treat work stress as a stand-alone issue, does not implement stress interventions in isolation from other organization initiatives, but does link stress intervention to organizational-level outcomes (e.g., productivity, absenteeism, injuries, illness, job satisfaction) (p. 155).

Coping Strategies to Deal with Stress

Do teachers work in environments that make their lives more vulnerable to getting stress? According to Reglin and Reitzammer (2000), public school violence and teacher overload can be major sources of stress, thus causing tremendous amounts of health problems, lack of productivity, and depression. They found that teacher overload, for instance, occurs when a teacher accepts too many tasks for the time allowed to complete and accomplish said tasks. Markham (1999) found that coping strategies, such as socio-emotional coping involving expressing feelings to others and seeking support, as well as seeking outlets through religious involvement, can be successful to the overloaded educator. Teachers continue to indicate a need for assistance in dealing with stress to manage stress levels more effectively. As Reglin and Reitzammer (2000) commented “coping strategies defuse feelings of stress. By being aware of their level of vulnerability to stress, then proactively pursuing a plan to reduce vulnerability, teachers can better cope with the daily stressful routines of dealing with students” (p. 592).

Researchers have found a number of means that teachers can utilize to assist them in developing coping strategies to dealing with stress. The following questions from Reglin and Reitzammer (2000) can help teachers manage stress more effectively:

1. Have you identified and prioritized the important tasks that you want to accomplish?
 2. Have you organized a time schedule for accomplishing your objectives? If so, is the schedule a reasonable one for doing a good job?
 3. Have you established adequate resources to assist you in achieving your objectives?
 4. How will you evaluate your effectiveness in accomplishing your objectives?
- (p. 591)

Stress levels can be a combination of both physical and psychological factors of a job. Because teachers tend to be in highly stressful jobs, much must be done to better understand the causes of such stress in work environments. “The experience of stress results from the teachers’ perceptions of demands stemming from a lack of effective coping resources, and the ultimate threat to the teachers’ mental or physical well being” according to Abel and Sewell (1999, p. 287). Though physical job factors are related to stress levels, Levine and Ursin (1991) found that psychological and emotional loads seem to be the most frequently reported stress stimuli, as well as being the reason for most stress responses. Eriksen and Ursin (1999) report that what actually predicts stress-related illnesses and health problems is the combination of psychological demands, task control and skill use at work. According to research by Karasek (1997):

Jobs with high demands, low control, and low social support carry the highest risk of illness and disease. Low psychological demands and high levels of control carry the lowest risk. Jobs with high psychological demands and high

control, and low psychological demands and low control, carry an average risk.

(p. 34)

Stress can have serious consequences and must be a source of study for the profession of teaching (Pitchers & Soden, 1999). Teacher stress has been defined by Kyriacou (2001) as “the experience by a teacher of unpleasant, negative emotions, such as anger, anxiety, tension, frustration or depression, resulting from some aspect of their work as a teacher” (p. 28). The teaching profession remains one of the highest stress professions (Kyriacou, 2000), so schools need to be active in developing strategies whereby teachers can cope with such demanding jobs. Other researchers report that as classroom situations deteriorate, teachers become emotionally exhausted, develop negative attitudes toward students and their jobs, and are unable to accomplish their educational goals for themselves or for their students (Abel & Sewell, 1999).

As defined by Kyriacou (2001), two types of coping strategies can be utilized in order to better manage such stress levels. The two main types of coping mechanisms are direct action techniques and palliative techniques. Direct action techniques involve approaches that teachers themselves can do to eliminate or deal with the stress of their professions. Such techniques involve simple management or organizational effectiveness, developing new skills, or working to communicate more easily with other fellow educators. Palliative techniques do not directly deal with the stress, but are aimed at providing ways to lessen the stress levels. Such techniques can be either mental, by attempting to change a particular situation, or physical, by finding ways to relieve the stress build-up. Such techniques are a great way to begin dealing with stress, but schools can also go a long way in aiding teachers as teachers attempt to alleviate stress

levels. For instance, Kyriacou (2001) defined fifteen characteristics which can help make a school healthy by reducing the potential for stress:

1. Good communication between staff
2. A strong sense of collegiality
3. Management decisions based on consultation
4. Consensus established on key values and standards
5. Whole school policies in place
6. Role and expectations clearly defined
7. Teachers receive positive feedback and praise
8. Good level of resources and facilities to support teachers
9. Support available to help solve problems
10. Policies and procedures are easy to follow
11. Red tape and paperwork is minimized
12. Additional duties are matched to teachers' skills
13. Building environment is pleasant to work in
14. Senior management makes good use of forward planning
15. Induction and career development advice is given. (p. 31-32)

The researchers also report that teacher workshops can also be effective and useful in the reduction of stress in educational workforces. For example, such workshops can help teachers to develop a mix of techniques to use and ways of working to minimize unnecessary sources of stress.

When coping strategies are ineffective or inappropriate, stress occurs. As found by van Dick and Wagner (2001), stress among teachers is seen mainly as a negative

effect with diverse psychological, physiological, and behavioral correlates. If these stressors are not handled appropriately or healthily, the researchers stated, other health problems can occur, such as heart disease. Fletcher (1988) also reviewed and researched the affects of job stress and concluded in his findings that chronic job stress can result in a decrease in not only physical and psychological health, but also in life expectancy.

The organizational structure of a school is often said to create a number of unnecessary obstacles to teachers' effectiveness in the classroom and to the instruction level. These obstacles frustrate the efforts involved in fully educating students. School organizational reform, restructuring, and reviewing of techniques are all going to be required in order to better facilitate a positive teaching environment for teachers (Liston, 2000). The support from the upper levels of the hierarchy, including administrative and personnel supervisors, can be an important place to start if effective change is going to take place in correcting the obstacles that exist in school settings. Some questions according to Brewer and McMahan (2003) that need to be answered concerning obstacles and difficulties of the environments of schools are:

1. What are the perceptions of organizational support received from communication from supervisors?
2. Does such stress come from a lack of collegiality amongst co-workers?
3. Are policies and procedures in place that help or hinder educators' stress levels?

According to the researchers, once administrators find the answers to these types of questions, actual change can take place by creating policies and procedures that can

have a positive effect on stress levels. Staff development strategies and intervention can be created to assist those in dealing with increasing levels of job stress.

Gehring and Hollingsworth (2002) found, through research from correctional education literature, social change, and burnout concepts, a simple formula to aid educators in dealing with burnout and stress:

1. Be patient and familiarize yourself with conditions as they are. It means that you can compromise when required, and can adjust your output to a level you can maintain over time.
2. Be a role model.
3. Work with colleagues to improve the program through social change.
4. Strive to achieve excellence in classrooms, the profession, and oneself.
5. Learn about collaborative methods and use them whenever you can.

Collaboration from the inside out not only creates a better program, it also role models the social skills we expect our students to develop.

6. Nurture your professional identification as you improve your professional excellence. Keep your eyes on the big picture to improve each of the smaller ones (p. 94).

Administrators, especially principals, also have to deal with increased levels of stress and pressure, which also impacts the school environments of stressful teachers and personnel. For example, administrators are faced with an ever growing list of stressful situations themselves, which affects the learning atmosphere within their schools. Those stressors include:

1. The erosion of the authority to effect change in their organizations

2. Escalating expectations for accountability
3. Lack of support
4. Statutes and mandates that dictate practice
5. Compensation that is not commensurate with their responsibilities
6. Long hours that leave little time for family or personal renewal
7. Pervasively stressful political environment for school leaders. (Adams, 1999, p. 8)

A supportive, positive administrator can be the difference in keeping and retaining teachers and support staff.

As mentioned earlier, teachers go into the profession of education to make a difference, to motivate children, to challenge, and to gain a sense of accomplishment and pride in what they do. However, many teachers have felt left out of the reform process and only gain a sense of success if their students actually gain achievement scores on one or many types of performance tests offered. This “inconsequentiality” – a sense that job efforts are not being met with the proper rewards, satisfactions, or fulfillments – has led many educators to have a sense of being and feeling undervalued, denigrated, overworked, unappreciated, and burned out (Farber, 2000).

An improved educational process to assist teachers and students in the proper ways to deal with stress is needed. As Abel and Sewell (1999) indicated:

Effective delivery of a productive education requires that teachers meet demands and cope with potential threats to their psychological and physical well-being, whatever the source. Consequently, achieving education goals for students in

the classroom mandates addressing the negative implications of stress and burnout among teachers. (p. 293)

Self-Management Skills to Reducing Stress

Having to cope with job stress is difficult because it is often problematic to change the teacher's working environment. The type of work done can contribute to the nature of individual stressors. As Iacovides, et. al., (2003) found, one such field is in human services, where concern and detachment may make it more stressful. Stress and burnout tend to affect those individuals who enter into highly idealistic professions, such as teachers and social workers. Such work areas demand high levels of emotional investment and altruistically oriented personality characteristics to reach high levels of personal satisfaction. It is only through the development of self-management skills that educators, and more broadly health professionals, work to better understand and achieve a greater balance in order to reduce the symptoms of burnout, stress, and depression (Charman, 2000).

Researchers note that there are healthy ways in which to effectively treat negative work-place environments. For example, Hamann and Gordon (2000) have developed some simple solutions to deal with stressful working conditions. They include the following: (a) changing job responsibilities or assignments, (b) taking a leave of absence, (c) pursuing professional development opportunities, such as workshops or degrees, (d) making faculty exchanges, (e) redistributing work and leisure hours, (f) exercising more frequently, (g) taking part in more leisure activities, (h) networking to discuss and reduce stress factors, and (i) involving oneself in professional guidance to eliminate profound stress levels. The researcher also indicated other ways

to improving workplace settings. For example, one can cut back on overtime hours at the job or promote more of a balance between the workplace setting and lifestyle options outside of the job so that the job does not sacrifice time with family and friends. Another option is to take more time for vacations and short get-aways.

Organization Support and Stress

Administrators must remain proactive when giving teachers opportunities for success by providing as much support and assistance as possible. In research done by Brewer and McMahan (2003), there existed a strong perception that stress as it is related to a lack of organizational support is actually more severe than stress related to the regular job pressures educators undertake. Some of those stressors that provide such a perception of lacking organizational support include such difficulties with supervisors, administrators, co-workers, as well as dealings with organizational policies and procedures, which can be a major hindrance to educators (Spielberger & Vagg, 1999). For example, Travis Twiford, a former superintendent in North Carolina, identified four major causes of serious frustrations facing educators, which can lead to stressful situations:

1. **Expectations.** The growing demands from communities, school boards, states, and schools have added to the list of frustrations felt by teachers and administrators.
2. **Time Constraints.** Because students learn at different rates, superintendents often feel that they lack the time needed to provide adequate instruction.
3. **Financial Constraints.** More mandates from state and local agencies have added to the financial situations facing school systems.

4. Personnel. More authority and autonomy are needed by principals and superintendents in order to reward those educators who are productive and remove those who are ineffective. (Colgan, 2003)

The literature also supports this finding by indicating four main areas that teachers have identified as lacking in schools. According to Botwinik (2007), time, resources, and support are three; however, a fourth area of concern, respect, must be singled out as a major area needing attention. Teachers express this area as being of major concern, for far too many in the local communities and in the central office do not realize the amount of disrespect they give to teachers. Many outside of education believe that teachers have it “easy” (Botwinik, 2007). This belief resonates among educators as a major stumbling block to achieving job satisfaction and reaching beyond their stressful environments (Naylor, 2001).

Stress Reduction – TQM/TQE

If teachers can reduce the amounts of stress in their lives, they can become more productive in the classroom and more satisfied in their personal lives. Van der Linde (2001) discussed a new paradigm of management called Total Quality Management (TQM) which has emerged in school settings as a means of reducing the stress levels of teachers and making education more effective. He found that one can attribute a great amount of illnesses to excessive stress, thus making it even more necessary that a means be created to deal with such a concern among educators. Total Quality Management is a means of stressing the use of human potential in order to assist teachers who are looking for ways to reduce their own stress levels and to improve the teaching environment. As Van der Linde (2001) found:

More and greater demands are stimulating, and create energy, but if this stretch extends beyond the person's ability to handle them, they may lead to high levels of anxiety and diminished work efficiency. Continuous demands without an increase in handling sources may lead to fatigue, exhaustion and even burnout (the utmost form of negative stress). (p. 377)

Van der Linde (2001) also found ways in which Total Quality Management (TQM) can be applied to educational settings by calling the plan for implementation Total Quality Education (TQE). According to Van der Linde (2001), it is the aim of TQE to not only improve but also to enhance the quality of schools in order to fulfill the expectations demanded by its clients; for this to occur, it becomes important to realize the teacher's potential as a necessity for success. In the analysis of how TQM/TQE can be a benefit to education, two areas must be reviewed:

1. The school as an organization must be studied. The demand upon school teachers differs from the demand upon employees working in industry because the former's demands are much more complex. Since the school is focused on educative teaching, there are more people (teachers and children) involved. Therefore, the school as an organization is much more complicated than may appear at first sight. Consequently, different demands that may cause stress are placed on the teacher.
2. What is the relevance of TQM for reducing teacher stress? There are six important aspects of TQM that can be useful in reducing teacher stress.
 - a. The Problem-Solving Method can promote greater clarity and understanding in solving these problems. It does no good to hurry

solutions. For instance, an experienced principal can do much with an inexperienced staff by aiding and suggesting the proper solutions to particular problems that may be encountered.

b. Learning the correct attitude to take is also of great importance. For example, quality should be stressed.

c. Identifying the client is considered one of the most important principles of the TQM paradigm. The family, state, school, and church should bear the responsibility of preparing the child for the demands that the external client is going to make. By knowing that he or she is not solely responsible for quality education may help to reduce the teacher's stress.

d. Compulsory in-service training for all involved in education should also be required. According to Van der Linde (2001), this is an integral part of TQM, because with the principles of TQM, everyone involved in educational process, namely the teacher, the parent, the principal and other office bearers, should be continuously be trained in order to fulfill their tasks to the best of their abilities. Uncertainty may bring forth unnecessary stress.

e. Anxiety must also be reduced, because it does nothing but obscure efficiency. Anxiety can cause resistance to change, which can have drastic effects on communication levels within the schools and the abilities of others to learn effectively. It is the principal's role to

contribute to a teacher's creativity by reducing anxiety and encouraging growth and enthusiasm for new ideas and possibilities, and

f. People need to be treated with the realization that they have unlimited potential. Once again, the principal can do much to foster this belief amongst his staff by providing encouragement, increasing self-assurances, and enabling them to reach their potentials in a supportive, healthy environment of growth and development so that success and achievement can be reached. (Van der Linde, 2001, p. 381)

“Undoubtedly, TQE has many advantages for the effective management of the school and the reduction of teacher stress...for in a rapidly changing society this management paradigm can help teachers to manage change significantly and creatively and thus to reduce unnecessary stress,” (Van der Linde, 2001, p. 381). Fields (1993) stated that “TQE is a process that builds the human spirit, strengthens bonds between people, and expands the mind of every participant” (p. 9).

Identifying and Restructuring the Educational System

As McLaughlin, et al., (1986) noted, the U.S. educational system of the 1980s was structured in such a manner as to guarantee the failure of teachers. Their findings uncovered other difficulties facing educators that give credence to understanding their problems of stress:

1. Classroom Composition

- a. class size is too large
- b. increased academic and emotional needs of students

2. Working without Tools and Equipment

3. Administrative Actions

- a. lack of clear and consistent policies on discipline and attendance
- b. teaching outside area of training

4. Nobody Says Thanks

- a. lack of recognition
- b. lack of respect

5. New Teachers/First Year Teachers

- a. difficult teaching assignments
- b. thrown into a war-zone. (p. 422-424)

Richard Riley (1999), former United States Education Secretary, reinforced these findings in his annual State of American Education address when he stated that “We need to hire more than two million teachers in the next ten years” and that “too many of our best teachers are leaving the profession due to low pay, poor working conditions, and weak school leadership” (p. 14-15). Romano and Wahlstrom (2000) also concluded that such difficulties within school systems can be corrected at very little expense to the school system; for instance, schools can create programs and activities within their individual buildings to benefit teachers, such as physical activities and interpersonal communication opportunities for support. This can be done through a variety of personnel already on staff, including the physical education teacher, school counselor, nurse, and the schools professional development staff. Sorros and Sorros (1987) noted, “Assuming that burned out teachers and their problems will disappear is doing them, their students, and their schools a disservice” (p. 227).

A broad, wide-range agenda is needed to restructuring the teaching profession for success. McLaughlin, et. al., (1986) provided five areas which may yield the necessary means to improve the working conditions of educators:

1. Parental Support - This is a major area that needs attention in order to bridge the gap between home and school.
2. Buffering Teachers - Principals need to provide a system that protects teachers and their classrooms from distractions.
3. Feedback - Administrators must do a better job of providing feedback in order to increase a teacher's effectiveness, self-worth, self-esteem, and performance.
4. Professional Development – More must be done to provide for opportunities for a merger between organizational and personal goals.
5. New Teacher's Needs – This area must be restructured and reassessed for maximum effectiveness.

Administrators and supervisors are not the only ones who can help teachers with stress; teachers themselves can do things to avoid some of the stress of the "Burnout Blues." Lamb (1995) provided ten helpful tips that teachers can use to help prevent getting stressed out:

1. Do not take so much work home.
2. Do not bite off more than you can chew.
3. Accept what you can change and who you can not.
4. Leave on time and don't come in too early.
5. Do not volunteer for every committee.
6. Make a change.

7. Do something for you!
8. Get out and exercise.
9. Set aside time each day for you.
10. Get some rest. (p. 24-25)

Stress continues to be a source of concern for those in education. According to Perreault (2000), teachers often complain about those feelings they encounter, such as those of being defeated, powerless, and uncertain if they are doing what needs to be done to really impact students in the best fashion for success. One prime example Perreault used is that of a teacher being observed. The researcher equated that experience for teachers when they have a little lesson tucked away for the moment it is needed for the big observation that comes once a year or once a month---it is always there when needed. However, educators now have that feeling of uncertainty all the time, which is causing them to experience feelings of distress and resentment towards others in the field of education. One of the main areas of teacher distress is a direct result of the increased amounts of testing and the pressures of such results on both the students and the teachers to be successful. For example, Perreault (2000) commented about what one educator's response to the impact that high-stakes testing has had on her professional life. Her quote was as follows: "We have to get them (students) ready...so they can be part of the machine?" (p. 708). The educator went on to comment about the role of how even state legislatures have impacted the lives of educators by adding continuing restrictive influence to the teaching process. She commented, "I mean, these are the people I fought against in the 60s and now they are running the schools? They're telling me how to teach, what to teach? They never give up. It's like the *Night*

of the Living Dead” (p. 708-709). Perreault (2000) finally commented that such conversations with teachers indicated to him that educators are fighting a battle to control the ideology of school reform because there is the impression of such forces to reflect an ever increasing standardization of such curriculum and instruction. Such action from the political arena to add increasing levels of stressors to the educational environment has affected the autonomy and professionalism of teachers, but many do not see a way out of this situation which exists in states around the nation and in local communities:

Recruiting and Retaining Future Educators

Despite the many difficulties and struggles teachers have to deal with, there are still large numbers of students who want to become future educators. The research conducted by Berg, Reno, and Coker (1992) produced a personality profile of reasons students want to become teachers in the first place. Their findings include such responses as:

1. To instill in children the love of learning as it was instilled in me by my teachers,
2. To make a difference in society,
3. To make a difference in the lives of children,
4. To choose a profession that offers many personal rewards and much self-fulfillment, and
5. To give something back to a world that has given a lot to me.

Improving job satisfaction will help reduce teacher stress levels and to recruit future educators into the field. For example, Zabel and Zabel (2001) stated that:

Approaches to help ameliorate this condition could involve reducing federal and state bureaucratic requirements, preparing teachers to be more efficient in handling paperwork, providing more clerical assistance, and differentiated staffing arrangements that allow individual members of intervention teams to focus on roles and responsibilities which they prefer and at which they are proficient. (p. 138)

Still, other researchers are concerned with the effects of the disarray of the school environment in some school settings. "As the climate of the classroom deteriorates, teachers can become emotionally exhausted, develop negative attitudes toward their students and their jobs, and accomplish few educational goals for their students," according to Abel and Sewell (1999, p. 288). Crosby (1999) concluded the following:

Violence, student alcohol and drug use, low student academic performance, parental apathy, the demands for increased accountability, inadequate funding, and a highly charged political environment continue to impact schools. Although these problems are found in all schools, urban school districts face the most pressing and serious challenges. Many urban schools are more than 50 years old, with buildings in need of repair or replacement. Teacher and administrator salaries dwarf their rural and suburban counterparts and contribute to higher turnover among urban educators. All of these factors contribute to a complicated and troubling school environment. (p. 301)

Cooley and Shen (2000) indicated in their findings that teachers are very cognizant of the nature of urban school districts, for "reform, restructuring, and calls for

increased accountability have resulted in increased paperwork, supervision, and coordination of state initiatives" (p. 451). The researchers further determined that:

Calls for greater accountability and school improvement have created an environment characterized by cynicism, mistrust with school officials, and parents wary of honest communication. The parent-school partnership has eroded with the casualty -- trust, cooperation, and the umbrella of support that once surrounded students. (p. 451)

Cooley and Shen also reported that if schools are to improve, a new generation of leaders must be identified and cultivated to address these challenges. For instance, leaders must take an active stand to attract the best and most qualified candidates. They also identified the following five policy recommendations to begin recruiting and retaining the best educational leaders for school systems:

1. Develop a new policy framework for school boards and superintendents.
2. The principal's job description needs to be reengineered.
3. Compensation for principals needs to be adjusted.
4. Boards and superintendents must understand that their actions contribute to their respective reputations.
5. Urban educators must actively market and recruit principals and other administrative staff. (p. 452-53)

There is no one answer to easily fix the educational system. Much work and restructuring are required. Finally, as the researchers stated, "There are no magic bullets...the leadership infrastructure must be systematically addressed. Anything less than a systematic total reengineering will likely fall short" (p. 453).

Teacher Satisfaction

Teacher satisfaction can go a long way in aiding the process of teacher retention and teacher commitment. Woods and Weasmer (2002) maintained that teacher job satisfaction is a “predictor of teacher retention, a determinant of teacher commitment, and, in turn, a contributor to school effectiveness” (p. 186). The researchers concluded that “teacher satisfaction reduces attrition, enhances collegiality, improves job performance, and has an impact on student outcomes” (p. 186). It then becomes important to provide teachers with a supportive network to aid in developing programs that add to the job satisfaction level and increase the potential for retention if one is to bring down the levels of attrition occurring amongst those in the teaching profession. Teachers can become valuable contributors to the process by being involved in curriculum development, procedures, and implementation of policies; once individuals participate energetically, share authority, and engage in meaningful work, they begin to shed most negative emotions and to demonstrate their knowledge (Shore, 1992). Not only is it essential for teachers to know that they have contributed to shaping curriculum, but they also need to sense their own roles in the culture of the school; to become stakeholders, they need to know that their contributions to the school culture are honored (Woods & Weasmer, 2002).

Other solutions to dealing with stressful situations involve developing collegial environments in which teachers can feel that a strong, supportive network is there for them. Such strategies to enhance and develop such collegial environments include mentoring programs to work with new teachers, sharing leadership roles, and collaboration of ideas and thoughts (Woods & Weasmer, 1997). The benefits of such

collegiality are very much two-fold in nature, for both the new teacher and the veteran teacher have an opportunity to learn from one another. For example, Boreen and Niday (2000) found that it is important for such a two-way exchange to take place even before the new teacher's first entrance into the school. Also, Woods and Weasmer (2002) stated that:

When veteran teachers and novices share their ideas/practices, benefits are reciprocal. The beginning teacher gains a clearer awareness of the school culture and a stronger sense of what is expected in planning, evaluating, and managing the learning environment. The veteran teacher is afforded fresh perspectives on contemporary practices and has the opportunity to reflect and to validate his or her teaching strategies. (p. 187)

The researchers stated that this type of reciprocity can go a long way for all teachers involved, thus creating a wonderful opportunity for job satisfaction.

Shared leadership can be seen as another way in which teachers can effect change in their work environments, which can be a positive means of lessening stress. Graham (1996) commented on the importance of teachers being active participants in school cultures, as opposed to being passive bystanders. This is the only way to thrive collegially. For instance, Woods and Weasmer (2002) found that:

When teachers assume leadership positions in effecting school change, they assert their roles as experts on the school's culture. Teachers who claim a voice in moving toward organizational goals increase their commitment to the district and enhance their job satisfaction. (p. 187)

Martin and Kragler (1999) noted that “for reform to occur schools need to create cultures conducive to learning for teachers and students...planning and organizing for a collaborative community is crucial” (p. 315-316). Other researchers also discuss the importance of having and creating the proper school environment for maximizing learning for all involved. For example, those educators who work on projects together feel a shared investment. This type of collaboration works to unify and strengthen commitment (Woods & Weasmer, 2002).

Support meetings, mentoring, and new ventures outside of education are other successful methods of lessening stress and improving job satisfaction amongst teachers. Support meetings can help to alleviate stressful situations by better preparing one for such a setting. These types of meetings can be beneficial to creating bridges of support between new teachers and veteran educators. These partnerships can lead to mentoring programs whereby experienced teachers can share valuable knowledge and expertise with those novice teachers, who are in real need of guidance and direction. Such support networks can lead to friendships and collegial partnerships outside of the classroom, such as community organizations, health clubs, and the development of new talents and interests. Strategies for success can increase job satisfaction, assist in the retention of new teachers, and improve the nature of the school’s climate in such a positive way as to make teaching much less stressful and much more productive and supportive (Woods & Weasmer, 2002).

Summary

Stress plays an important part of many professions, especially in the area of the teaching profession; however, there is still a misconception among some that teachers

have jobs that offer short hours and long vacations (Botwinik, 2007). Much can also be said about the structure of school systems and how such structures lend itself to the problem of stress in educational settings. As Liston (2000) stated, a complete restructuring, reviewing, and reforming of school settings is not only needed but going to be a requirement if a more positive teaching environment is attainable for today's teachers.

The issue of stress affecting teachers is not a new concept, for it has been an issue of concern for decades. For example, Vetter (1976) addressed the issues of occupational stress and pressures in job settings and stated the importance of being proactive in handling such problems. He stated that by taking such a stance, one could expect much better job results and reduced stress levels. Other researchers also stated the importance of recognizing stress as a means of controlling it and coping with it. One such example includes statements by Brimm (2001) whereby he implores administrators to strive to better "understand" stress in order to find more efficient ways of seeking to cope with it as it occurs. One other example confronting teachers is their own perceptions to stress. For instance, Tuettemann and Punch (1992) discussed a number of factors, including access to facilities, student misbehavior, total workload, etc., that all correlate positively with teacher stress.

Other researchers and theorists emphasize the importance of teachers to take a more active role in dealing with the stressors they encounter and to make changes that will allow for better coping strategies that will help to alleviate stress when it occurs or to prevent it before it occurs. Weissbourd (2003) found the importance of mentoring, for example, as an important means of addressing the difficulties and stressful

occurrences that take place in teaching. His findings found that mentoring provides teachers with valuable tools in becoming more competent in their fields, in becoming more realistic in their accomplishments, and in becoming more innovative in handling difficult situations as they arise in more creative manners. Other researchers provide other tips that teachers can utilize in preventing stress from becoming a bigger problem. One such instance, as stated by Lamb (1995), involves simple suggestions of not taking so much work home, exercising more, resting, accepting what you can change, and doing more for yourself, to name a few.

Theorists have noted that there are still many who want to go into teaching, but more must be done to help facilitate the process. Berg, Reno, and Coker (1992) found that people who go into teaching do so for a number of reasons. They want to make a difference in the lives of students, society, as well as finding a rewarding profession. More, however, must be done to recruit and retain such people for the teaching profession. For example, Cooley and Shen (2000) said that in order to get the best candidates to go into teaching, more must be done administratively, from principals to school boards and even at the superintendent levels. As Woods and Weasmer (2002) indicated, much can be done to making teaching more productive and supportive for future teachers.

The following chapter includes a more detailed view of the methodology and procedures for this study on stress. A restatement of the research questions and hypotheses is provided. Procedural details, the research design, the sample, the instrumentation, the validity and reliability, the data analysis, and the limitations are all stated in more detail, as well.

CHAPTER 3

METHODOLOGY/PROCEDURES

In this chapter, the researcher restates the research problems, research questions, and the null hypotheses in more detail. The research design, sample, instrumentation, collection of data, and techniques of analysis are also discussed.

Restatement of the Problem

Stress in the workplace is an issue of concern for teachers today. Stressful work situations are not just a growing problem for young teachers, who already have a high level of stress because of lack of teaching experience, but also for veteran teachers (Botwinik, 2007). Working conditions such as: (a) problematic school environments, (b) time constraints, and (c) pupil misbehavior have been shown to be the greatest stress factors for the teaching profession (Forman, 1990). Reglin and Reitzammer (2000) also concurred with the above findings relating specifically to public schools, noting that violence and teacher overload are also major sources of stress for teachers. These stressors result in a continual decline in the number of teachers available to fill the necessary positions, resulting in a shortage in the field. Such stressful work-place environments have also led to other areas of concern beyond occupational stress, such as personal health issues, family problems, and depression and general dissatisfaction in life (Black, 2003).

The main problem in this study involves the issues of whether there are relationships between the independent variables of years of teaching experience, educational levels of teachers (college degrees), age, gender, social interest, geographical location (North and South Louisiana), educational levels taught by teachers (elementary, middle, high school), and the dependent variable of teacher stress.

Hypotheses/Research Questions

The research questions for this study are:

1. Do teachers of varying levels of years of teaching experience differ in levels of stress?
2. Do teachers of varying educational levels (college degrees) differ in levels of stress?
3. Do teachers of varying levels of age differ on levels of stress?
4. Do teachers of different genders differ on levels of stress?
5. Do teachers of varying levels of social interest differ on levels of stress?
6. Do teachers in various geographical locations (North and South Louisiana) differ on levels of stress?
7. Do teachers of different educational levels taught (elementary, middle, high school) differ on levels of stress?

The research hypotheses (RH) for this study are as follows:

1. There is a significant difference between varying levels of years of teaching experience and stress levels.
2. There is a significant difference between varying educational levels of teachers (college degrees) and stress levels.

3. There is a significant difference between varying levels of age and stress levels.
4. There is a significant difference between different genders and stress levels.
5. There is a significant difference in stress level of teachers reporting high and low levels of social interest.
6. There is a significant difference between geographical location (North and South Louisiana) and stress levels.
7. There is a significant difference between different educational levels of students taught by teachers (elementary, middle, high school) and stress levels.

The following are the null hypotheses (H):

1. There is no significant difference between varying levels of years of teaching experience and stress levels.
2. There is no significant difference between varying educational levels of teachers (college degrees) and stress levels.
3. There is no significant difference between varying levels of age and stress levels.
4. There is no significant difference between different genders and stress levels.
5. There is no significant difference in stress level of teachers reporting high and low social interest.
6. There is no significant difference between geographical location (North and South Louisiana) and stress levels.
7. There is no significant difference between different educational levels of students taught by teachers (elementary, middle, high school) and stress levels.

Research Design

A convenience sampling procedure was used to select participants in this study. The research design was a descriptive/comparative design. This design was selected to test the null hypotheses which included seven independent variables and the dependent variable of a self-reported teacher stress score.

The independent variables were (a) years of teaching experience, (b) varying educational levels of teachers (college degrees), (c) age, (d) gender, (e) social interest, (f) geographical location (North and South Louisiana), and (g) educational level taught by teachers (elementary, middle, high school). The dependent variable was teacher stress as measured by the scores on the *Teacher Stress Inventory* (TSI). The relationships between years of teaching experience, varying educational levels of teachers (college degrees), age, gender, social interest, geographical location (North and South Louisiana), and educational levels taught by teachers (elementary, middle, high school) were examined as they related to stress.

Sample

Elementary schools, middle schools, and high schools from six school districts in Louisiana from the Louisiana School Directory were identified and purposefully selected for the sample. The researcher first contacted school superintendents from each of the two geographical locations (North and South) of Louisiana. Once permission was granted to survey schools in the respective districts, the researcher was then given permission from the respective school superintendents as to which schools within his/her district that the researcher would be allowed to survey. Elementary schools chosen for this study were

categorized as schools falling into the range of being grades PK-6. Middle schools chosen fell into the range of being grades 5-8. High schools chosen for this study fell into the range of being from grades 9-12. Eighteen schools, six from each of the categories of elementary, middle, or high schools, were purposefully selected.

Instrumentation

The biographic information was requested on the demographic sheet, which can be found in Appendix A. Respondents provided self-reported information for the following variables: (a) years of teaching experience, (b) age, (c) level of students taught (elementary, middle, high school), (d) highest advanced degree attained, and (e) gender. Geographical location (North and South Louisiana) was also determined through the separate collection procedures of the surveys in order to study the two areas of the state.

The stress assessment instrument used in this study was the *Teacher Stress Inventory* (TSI) (Fimian, 1985) that measures the perceived strength of different stress experiences in relation to teaching roles. This instrument is appended in Appendix B. This instrument provides a self-report measure of the level of stress one experiences in his/her workplace setting. The TSI allows the determination of one's current stress level and was developed and normed for United States public school teachers in grades PK-12.

The *Teacher Stress Inventory* (TSI) is based on research done by Fimian (1985) and consists of 49 stress-related items designed to assess the strength of each event in a Likert-type measure ranging from 1(no strength; not noticeable) to 5(major strength; extremely noticeable). The TSI is composed of ten component factors: (a) professional investment, (b) behavioral manifestations, (c) time management, (d) discipline and motivation, (e) emotional manifestations, (f) work-related stressors, (g) gastronomical

manifestations, (h) cardiovascular manifestations, (i) fatigue manifestations, and (j) professional distress (Fimian & Fastenau, 1990).

The *Social Interest Scale* (SIS) is an operationalization of Adler's Social Interest construct, developed by Crandall (1975). It relates to one's adjustment and well-being. The response format for the SIS deals with one having to choose between pairs of personal characteristics or traits, whereby one chooses which one he/she values more highly. The SIS consists of having to choose between twenty four pairs of personal traits or characteristics. This instrument is provided in Appendix C.

Procedural Details

No data were collected until the study was approved by the Human Use Committee at Louisiana Tech University. Letters to the superintendents of the six school districts were sent. The results of the *Teacher Stress Inventory* were analyzed and reported to determine stress levels of teachers at varying levels in three different educational settings: elementary, middle, high school.

The following procedures were closely followed:

1. The initial step involved obtaining permission from the Human Use Committee at Louisiana Tech University for approval to conduct this study on stress.
2. The researcher then sent letters to the superintendents of the schools and school districts chosen for the study seeking permission for each school to participate in this study. After permission was granted from the respective superintendents, a convenience sample was selected. An explanation and

purpose for the study was provided to the principals and administrators of each of the participating schools.

3. The researcher delivered the surveys to the selected principals in the aforementioned schools. Teachers completed the surveys at the request of the principals who assisted in the process of soliciting the surveys.

Teachers were asked to complete the surveys by a given date and to return them to the principal for collection. Teachers completed consent forms at the time that they completed the surveys.

4. A general timeline for execution and completion of the surveys included an approximate time frame of two months after permission was granted from the Human Subjects Committee at Louisiana Tech University.

5. Such a timeline included the following breakdown:

- a. The first two to four weeks were spent sending letters to superintendents seeking permission to administer the surveys.
- b. Weeks four through six were allotted for administration and collection of the surveys during the allowed times.
- c. Weeks seven through eleven were spent scoring, coding, analyzing, interpreting, and reporting on the data.

6. The data were used to compare the relationships between stress as reported on the TSI with the seven independent variables.

7. The data were analyzed to determine the significance of the results.

Validity and Reliability

Fimian & Fasteneau (1990) reported satisfactory Cronbach's coefficient alphas for the TSI subscales and scale. As for the alpha reliability estimates of the TSI subscale and scale, "All but one of the subscale alphas exceeded 0.70; the whole scale alpha was 0.93." (Fimian & Fasteneau, 1990, p. 154) In their factor analysis, only factors with eigenvalues exceeding 1.0 were retained. Those items retained had the following characteristics: (a) factor loadings of 0.35 or greater; (b) loadings clearly on only one factor; and (c) did not reduce the scale/subscale internal consistency reliability.

Reliability of the TSI was established and investigated in terms of its alpha, split-half, test-retest, and alternate forms estimates. The whole scale alpha reliability for the combined sample was .93, which indicates a high degree of overall internal consistency across the samples. As for test-retest, data indicate that correlations ranged from .49 to .84 ($p < .001$) for the TSI subscales and .76 ($p < .001$) for the TSI scale for the strength dimension, were significantly related to their analogous measures across an eight week interval (Fimian, 1986).

Factorial Validity and Internal Consistency Reliability of the TSI

Fimian & Fasteneau (1990) determined that 58.0% of the total stress score variance could be attributed to the ten component solution. It was clear that: (a) ten discreet and interpretable factors resulted and (b) all of the items of the TSI actually exceeded the 0.35 loading criterion, with all but two exceeding 0.40. In order to define and interpret the percentage of variance per factor, the sum of the squares of their correlation coefficient was divided by 49, the total number of items. The reporting of the

subscales was done in a descending fashion based upon the relative proportion of explained teacher stress variance (Fimian & Fasteneau, 1990).

Validity and Reliability of the Social Interest Scale

Crandall (1975) reports that the split-half reliability utilizing the Spearman-Brown formula as being .77, while the test-retest reliability over five weeks was .82. Concerning validity, Crandall (1980) found that his “series of studies has yielded consistently positive correlations between social interest and both self-report and indirect measures of adjustment and well-being” (p. 492). Both reliability and validity have been established as Crandall (1975) stated that “preliminary findings indicate reasonable internal consistency and test-retest reliability for the Social Interest Scale” and that “several results establish the validity of the scale as a measure of social interest” (p. 113).

Data Analysis

Data were analyzed using the Statistical Package for Social Sciences (SPSS) to determine the relationship between stress on teachers in relation to the seven independent variables. Analysis of variance or t-tests were used concerning stress in relation to the independent variables as was appropriate to test the hypotheses. Alpha was set at .05 for all statistical tests. Duncan’s post hoc analysis test was used to determine differences among the groups following significant F statistics from ANOVAs. Results of the data were presented and discussed using charts, tables, and accompanying narrative.

Limitations

The results of this study may be limited in the following ways:

1. One limitation of the study involves the difficulties normally associated with a self-reported survey. Confidentiality and accessibility of the information being requested could cause apprehension or reluctance.
2. Only public schools in Louisiana in six distinct school districts were chosen for this study sample. Hence, one may not be able to make general assumptions about other geographic areas in the region, state, or nation.
3. Response bias could also be seen as a limitation. For example, concerns over the length of the instrument or the types of questions being asked could possibly limit accurate responses.
4. Another possible limitation could include the additional administrative requirements or expectations being asked to completing the survey. Other paperwork, duties, or workload/classroom issues could add more stress to those teachers being asked to complete the survey.

Interpretation Plans

Data reflecting the statistical analysis were presented in narrative form with accompanying tables and charts in chapter 4. The findings, conclusions, implications for education, and recommendations for research and practice were presented in chapter 5.

CHAPTER 4

RESULTS OF DATA ANALYSIS

The purpose of this study was to empirically assess the effects of seven independent variables: (a) years of teaching experience, (b) educational levels of teachers (college degrees), (c) age, (d) gender, (e) social interest, (f) geographical locations (North and South Louisiana), and (g) educational levels of students taught by teachers (elementary, middle, high school) on stress as reported by teachers on the *Teacher Stress Inventory* (TSI). The study utilized a demographic questionnaire to gather basic information, such as years of teaching experience, age, gender, highest advanced degree attained, geographical location (North and South Louisiana), and educational levels of students taught by teachers (elementary, middle, high school). Social interest and stress were assessed by the *Social Interest Scale* (Crandall, 1975) and the *Teacher Stress Inventory* (Fimian, 1985), respectively.

Teacher Survey Data Analysis

Once consent was obtained from the Human Use Committee at Louisiana Tech University, the researcher requested permission from superintendents in three public school districts in North Louisiana and three public school districts in South Louisiana to conduct this study. Superintendents who consented to participation assisted in selecting the schools for the study. Once permission was obtained from the

superintendents, the researcher contacted the principals of the selected schools to set up times for the surveys to be administered. The researcher had the surveys delivered to each of the schools, had the individual schools and principals assist in administering the surveys, and later collected the completed surveys at a pre-determined time as allowed by the principals. The results will be presented successively for each hypothesis listed below.

RH1. There is a significant difference between varying levels of years of teaching experience and stress levels.

The researcher hypothesized that for years of experience for teachers, there would be a significant difference between the four levels of years of experience (less than 5 years, 5-10 years, 11-24 years, and greater than 24 years) in relation to stress as measured by the *Teacher Stress Inventory* (TSI). The researcher hypothesized that teachers with greater than 24 years of experience would report less stress on the TSI because more experienced teachers would have made long term adjustments to teaching, been introduced to techniques of dealing with job related stressors, and developed a greater network of social support than those with less experience teaching. It was also hypothesized that teachers with less than five years of experience would report greater levels of stress on the TSI because classroom management issues and work overload are normally issues for those teachers who are in the early stages of their careers. Teachers in the two remaining groups would likely experience intermediate levels of stress as measured by the TSI because they reflect intermediate levels of administrative support and social networking.

As listed in Table 1, which displays the results of the oneway ANOVA conducted on the TSI scores as a function of the independent variable (years of teaching experience; less than five years, 5-10 years, 11-24 years, greater than 24 years), the F statistic was not significant ($F_{3, 412} = 0.21, ns$). As listed in Table 2, the mean TSI score for teachers with less than five years of experience is 11.22, ($n = 73$); the mean for teachers with 5-10 years of experience is 11.08, ($n = 126$); the mean for teachers with 11-24 years of experience is 10.96, ($n = 140$); the mean for teachers with greater than 24 years of experience is 10.88, ($n = 77$). The total TSI mean is 11.03, ($N = 416$).

Thus, the null hypothesis H1 was not rejected, and therefore, research hypothesis RH1 was not supported. There was no significant difference in stress, as measured by the TSI across the four levels of years of experience.

Table 1

Analysis of Variance Showing the Effects of Years of Teaching Experience on TSI Scores

	Sum of Squares	df	Mean Square	F	Sig
Between Groups	6.08	3	2.02	0.21	0.88
Within Groups	3883.79	412	9.42		
Total	3889.87	415			

Table 2

TSI Means of Teachers at the Four Levels of Years of Experience

Years of Experience	Mean	N	Standard Deviation
Less than 5 years	11.24	73	2.64
5-10 years	11.08	126	3.24
11-24 years	10.96	140	3.13
Greater than 24 years	10.88	77	3.03
Total	11.03	416	3.06

RH2. There is a significant difference between varying educational levels of teachers (college degrees) and stress levels.

The researcher hypothesized that for educational levels of teachers (college degrees), there would be a significant difference between the levels (bachelor's, master's, + 30 including doctorate) in relation to stress as measured by the TSI. The researcher hypothesized that teachers with college degrees beyond the bachelor's would experience less stress on the TSI because teachers with more college degrees would have been introduced to more classroom problem solving techniques, more classroom management techniques, and greater variations and approaches to teaching.

As noted in Table 3, which displays the results of the oneway ANOVA conducted on the TSI scores as a function of the independent variable (educational levels-college degrees; bachelor's, master's, +30 including doctorate), the F statistic was not significant ($F_{2, 413} = 1.97, ns$). As listed in Table 4, the mean TSI score for teachers with bachelor's degrees is 11.05, ($n = 251$); the mean for teachers with

master's degrees is 10.73, (n = 126); the mean for teachers with +30 including doctorate is 11.84, (n = 39). The total TSI mean is 11.03, (N = 416).

Thus, the null hypothesis H2 was not rejected, and therefore, research hypothesis RH2 was not supported. There was no significant difference in stress, as measured by the TSI and educational level (college degrees).

Table 3

Analysis of Variance Indicating the Effects of Educational Levels of Teachers on TSI Scores

	Sum of Squares	df	Mean Square	F	Sig
Between Groups	36.75	2	18.37	1.97	0.14
Within Groups	3838.46	413	9.29		
Total	3875.22	415			

Table 4

TSI Means of Teachers at Varying Educational Levels

Educational Levels	Mean	N	Standard Deviation
Bachelor's	11.05	251	3.00
Master's	10.73	126	2.98
+30 and doctorate	11.84	39	3.51
Total	11.03	416	3.05

RH3. There is a significant difference between varying levels of age and stress levels.

It was hypothesized that for the three levels of age of teachers, there would be a significant difference between the levels (22-34 years, 35-47 years, and 48 years and up) in relation to stress as measured by the TSI. The researcher hypothesized that teachers in the age range of 48 years and up would experience less stress on the TSI because teachers in the 48 years and up age range would presumably have more educational experiences, a larger social support system, and greater confidence and comfort in the profession. Those teachers in the range of 22-34 years would presumably experience greater stress in general since they are less likely to have high levels of educational experiences, social support, and confidence/comfort in the profession.

As noted in Table 5, which displays the results of the oneway ANOVA conducted on the TSI scores as a function of the independent variable (levels of age; 22-34 years, 35-47 years, 48 years and up), the F statistic was not significant ($F_{2, 408} = 0.61$, ns). As listed in Table 6, the TSI mean for teachers in the age level of 22-34 years is 11.08, ($n = 136$); the mean for teachers in the age level of 35-47 years is 11.22, ($n = 138$); the mean for teachers in the age level of 48 years and up is 10.82, ($n = 137$). The total TSI mean is 11.04, ($N = 411$).

Thus, the null hypothesis H3 was not rejected, and therefore, research hypothesis RH3 was not supported. There was no significant difference in stress, as measured by the TSI as a function of the three categories of age level (22-34 years, 35-47 years, and 48 years and up).

Table 5

Analysis of Variance Highlighting the Effects of Levels of Age on TSI Scores

	Sum of Squares	df	Mean Square	F	Sig
Between Groups	11.38	2	5.69	0.61	0.54
Within Groups	3795.90	408	9.30		
Total	3807.28	410			

Table 6

TSI Means for Teachers in the Varying Levels of Age

Age Levels	Mean	N	Standard Deviation
22-34 years	11.08	136	2.88
35-47 years	11.22	138	3.28
48 years and up	10.82	137	2.97
Total	11.04	411	3.04

RH4. There is a significant difference between different genders and stress levels.

The researcher hypothesized that there would be a significant stress difference between the genders. The researcher hypothesized that male teachers would report less stress on the TSI because male teachers would presumably have more control of the classroom environment and would likely be seen as more authoritative, resulting in less student behavior problems. Female teachers, it was hypothesized, would report more stress, possibly because of the behavior problems that may ensue with male students and because of the tendency to overwhelm oneself with workload issues.

Forlin (2001) found that classroom issues, such as behavior of students, have female teachers reporting greater stress than male teachers.

As noted in Table 7, which displays the results of the t-test conducted on the TSI scores as a function of the independent variable of gender, the t statistic was not significant ($t = -1.44$, $df = 416$, ns). As listed in Table 8, the mean TSI score for male teachers is 10.48, ($n = 58$); the mean for female teachers is 11.10, ($n = 360$).

Thus, the null hypothesis H4 was not rejected, and therefore, research hypothesis RH4 (that males would report less stress than females) was not supported. There was no significant difference in stress, as measured by the TSI as a function of gender.

Table 7

Results of t-test Conducted on TSI Mean Scores by Gender

	t	df	sig. (2-tailed)
Equal Variances Assumed	-1.44	416	0.15

Table 8

TSI Means for Male and Female Teachers

Gender	Mean	N	Standard Deviation
Male	10.48	58	3.31
Female	11.10	360	3.01

RH5. There is a significant difference in stress level of teachers reporting high and low levels of social interest.

It was hypothesized that high and low social interest teachers would differ in stress, as measured by the TSI. More specifically, the researcher hypothesized that teachers with greater social interest would report less stress on the TSI because greater social interest is associated with more effective adjustment in general (Crandall, 1980). Those teachers with lower social interest would be more likely to have less effective adjustment resources, making them more vulnerable to job-related stressors.

As listed in Table 9, which displays the results of the t-test conducted on the TSI scores as a function of the independent variable of social interest, which was divided into two groups by median split (high and low social interest), the t statistic ($t = 0.82$, $df = 421$, ns) was not significant. As listed in Table 10, the mean for teachers with high social interest is 11.12, ($n = 210$); the mean for teachers with low social interest is 10.87, ($n = 213$).

Thus, the null hypothesis H5 was not rejected, and therefore, research hypothesis RH5 was not supported. There was no significant difference in stress, as measured by the TSI as a function of social interest.

Table 9

Results of t-test Conducted on TSI Mean Scores by Social Interest

	t	df	sig. (2-tailed)
Equal Variances Assumed	0.82	421	0.41

Table 10

TSI Means for Teachers with High and Low Social Interest

Social Interest	Mean	N	Standard Deviation
High	11.12	210	2.87
Low	10.87	213	3.26

RH6. There is a significant difference between geographical location (North and South Louisiana) and stress levels.

The researcher hypothesized that for the independent variable geographical location of teachers, there would be a significant difference between the teachers from the two geographical locations (North and South Louisiana) in relation to stress as measured by the TSI. The researcher hypothesized that teachers in North Louisiana would report less stress on the TSI because the environment and teaching systems have been much more stable over the last five years in comparison to the effects of the natural disasters of hurricanes in the southern part of the state. Teachers in South Louisiana, as hypothesized by the researcher, would report greater stress because of the effects of Hurricanes Katrina and Rita. The physical and societal disarray caused by said hurricanes has caused much uncertainty and confusion amongst families, neighborhoods, and environments. Therefore, teachers from South Louisiana would presumably experience greater stress in their recovering school districts.

As noted in Table 11, which displays the results of the t-test conducted on the TSI scores as a function of the independent variable of geographical location (North and South Louisiana), results of the t-test were not significant ($t = -0.50$, $df = 420$).

As listed in Table 12, the mean for teachers in North Louisiana is 10.91, (n = 204); the mean for teachers in South Louisiana is 11.07, (n = 218).

Thus, the null hypothesis H6 was not rejected, and therefore, research hypothesis RH6 was not supported. There was no significant difference in stress, as measured by the TSI and geographical location (North and South Louisiana).

Table 11

Results of t-test Conducted on TSI Mean Scores for Geographical Locations

	t	df	sig. (2-tailed)
Equal variances Assumed	-0.50	420	.61

Table 12

TSI Means for Teachers in Two Geographical Locations of Louisiana

Geo. Location	Mean	N	Standard Deviation
North	10.91	204	2.91
South	11.07	218	3.23

RH7. There is a significant difference between different educational levels of students taught by teachers (elementary, middle, high school) and stress levels.

The researcher hypothesized that for the educational levels taught of teachers, there would be a significant difference between the three levels (elementary, middle, high school) in relation to stress as measured by the TSI. The researcher hypothesized that teachers in the educational level of elementary schools would experience less stress on the TSI because teachers would have more control of the classroom setting,

have a distinct age advantage, and be more likely to have authority and mastery of the subject matter. Those teachers in the high school range would likely experience intermediate levels of stress since they can utilize more rational and logical approaches to teaching because the age levels of the students are more advanced. The greatest stress levels, as hypothesized by the researcher, would come from those teachers in the middle school range. Students in middle school would likely cause more stressful situations, such as classroom disruption and behavior problems, because of the biological, psycho-social changes taking place during these developing times of their lives. For instance, Lord, Eccles, & McCarthy (1994) found that this stage of adolescence is marked by biological, psychological, and social challenges and is an important period of development.

As noted in Table 13, which displays the results of the oneway ANOVA conducted on the TSI scores as a function of the independent variable (educational level; elementary, middle, high school), the F statistic was not significant ($F_{2, 415} = 2.03, ns$). As listed in Table 14, the TSI mean for teachers in the educational level of elementary schools is 10.82, ($n = 170$); the mean for teachers in the educational level of middle schools is 11.37, ($n = 164$); the mean for teachers in the educational level of high schools is 10.65, ($n = 84$). The total TSI mean is 11.00, ($N = 418$).

Thus, the null hypothesis H7 was not rejected, and therefore, research hypothesis RH7 was not supported. There was no significant difference in stress, as measured by the TSI and educational level of teachers taught (elementary, middle, high school).

Table 13

Analysis of Variance Showing the Effects of Educational Levels Taught by Teachers on TSI Scores

	Sum of Squares	df	Mean Square	F	Sig
Between Groups	38.28	2	19.14	2.03	0.13
Within Groups	3900.19	415	9.39		
Total	3938.47	417			

Table 14

TSI Means for Teachers in the Educational Levels Taught

Educational Level	Mean	N	Standard Deviation
Elementary	10.82	170	3.05
Middle	11.37	164	3.08
High School	10.65	84	3.04
Total	11.00	418	3.07

Additional Analyses

The researcher found no significant differences for any of the seven independent variables on the TSI total scale scores. This was unexpected, prompting the researcher to conduct additional analyses to see if any additional significant differences could be found. A factor analysis was done on the TSI scale items in order to obtain stress factors for use as subscales. The factor analysis revealed five distinct factors or subscales in the TSI. These five subscales were subjected to further analyses. These subscales concerned five specific forms of teacher stress. The five

TSI factors (subscales) were labeled as follows: (a) classroom management, (b) job recognition/status/respect, (c) workload overload, (d) time management concerns, and (e) psychological/ physiological concerns. Next, a subscale score was completed for each respondent based on each factor. The seven independent variables were then examined in relation to each of the five TSI subscales. Results for each of the five TSI subscales will be presented.

Classroom Management Subscale

The items on the classroom management subscale concerned stress about pupil misbehavior, authority issues with administration, classroom discipline, and poor motivation. A significant difference was found for the four levels of years of teaching experience (less than 5 years, 5-10 years, 11-24 years, and greater than 24 years).

As noted in Table 15, which represents the results of the oneway ANOVA conducted on the classroom management subscale as a function of the independent variable (years of teaching experience; less than 5 years, 5-10 years, 11-24 years, greater than 24 years), the F statistic was significant ($F_{3, 412} = 3.58, p < .01$). Thus, a significant difference was found in stress, as measured by the classroom management subscale of the TSI and years of teaching experience.

For the classroom management subscale, Duncan's post hoc analysis was performed to determine where the significant difference existed. The results of the analysis are shown in Table 16. Duncan's post hoc tests revealed that teachers with less than five years of teaching experience reported significantly greater stress, as measured by the TSI classroom management subscale ($M = 30.38$) than both teachers

with 11-24 years of experience ($M = 26.03$) and teachers with more than 24 years of experience ($M = 26.86$). Also, as indicated in table 16, teachers with 5-10 years of experience reported significantly greater stress ($M = 28.07$) than teachers with 11-24 years of experience ($M = 26.03$) and teachers with greater than 24 years of experience ($M = 26.86$).

Table 15

Analysis of Variance Showing the Effects of the Classroom Management Subscale of Years of Teaching Experience

	Sum of Squares	df	Mean Square	F	Sig
Between Groups	979.81	3	326.60	3.58	0.01*
Within Groups	37563.94	412	91.17		
Total	38543.75	415			

* $p < .05$

Table 16

Results of Duncan's Post Hoc Analysis of the Classroom Management Subscale as Related to Years of Teaching Experience

Years of Experience	N	Subset for alpha = 0.05*	
		1	2
11-24 years	140	26.03	
Greater than 24 years	77	26.86	
5-10 years	126	28.07	28.07
Less than 5 years	73		30.38

*mean scores of groups in the same column are not statistically significantly different

Also on the TSI subscale of classroom management, a significant difference was found for the levels of age (22-34 years, 35-47 years, 48 years and up) of teachers. As listed in Table 17, which represents the oneway ANOVA conducted on the classroom management subscale of the TSI as a function of the independent variable (level of age; 22-34 years, 35-47 years, 48 years and up), the F statistic was significant ($F_{2, 408} = 3.87, p < .02$). Thus, a significant difference was found in stress, as measured by the classroom management subscale of the TSI and levels of age.

Duncan's post hoc analysis was performed to determine where the significant difference existed for the three age groups on the classroom management subscale. The results of the analysis are displayed in Table 18. Findings indicated that teachers in the age group of 35-47 years reported significantly less stress ($M = 26.11$) as compared to teachers in the age group of 22-34 years ($M = 29.30$) on the TSI subscale classroom management. Teachers in the age group of 48 years and up ($M = 27.33$) did not differ significantly on the classroom management subscale as compared to teachers in the age groups of 22-34 years ($M = 29.30$) and 35-47 years ($M = 26.11$).

Table 17

Analysis of Variance Showing the Effects of the Classroom Management Subscale of Levels of Age of Teachers

	Sum of Squares	df	Mean Square	F	Sig
Between Groups	706.18	2	353.09	3.87	0.02*
Within Groups	37183.70	408	91.13		
Total	37889.89	410			

* $p < .05$

Table 18

Results of Duncan's Post Hoc Analysis of the Classroom Management Subscale as Related to Levels of Age of Teachers

Age Group	N	Subset for alpha = 0.05*	
		1	2
35-47 years	138	26.11	
48 years and up	137	27.33	27.33
22-34 years	136		29.30

*mean scores of groups in the same column are not statistically significantly different

On the classroom management subscale of the TSI, a significant difference was found for the educational levels of students taught by teachers (elementary, middle, high school). As noted in Table 19, which displays the results of the oneway ANOVA conducted on classroom management subscale of the TSI as a function of the independent variable of educational levels taught by teachers (elementary, middle, high school), the F statistic was significant ($F_{2, 415} = 10.45, p < .01$). Thus, a significant difference was found in stress, as measured by the classroom management subscale of the TSI and educational levels of students taught by teachers (elementary, middle, high school).

For the classroom management subscale, Duncan's post hoc analysis was performed to determine where the significant difference existed. The results are displayed in Table 20. Findings indicated that elementary teachers experience significantly lower levels of stress ($M = 25.17$) than middle school teachers ($M = 29.86$) or high school teachers ($M = 27.88$) as related to the classroom management subscale.

Table 19

Analysis of Variance Showing the Effects of the Classroom Management Subscale of Educational Levels of Students Taught by Teachers

	Sum of Squares	df	Mean Square	F	Sig
Between Groups	1853.13	2	926.56	10.45	0.00*
Within Groups	36786.90	415	88.64		
Total	38640.03	417			

*p < .05

Table 20

Results of Duncan's Post Hoc Analysis of the Classroom Management Subscale as Related to Educational Levels of Students Taught by Teachers

Educational Level	N	Subset for alpha = 0.05*	
		1	2
Elementary	170	25.17	
High School	84		27.88
Middle	164		29.86

*mean scores of groups in the same column are not statistically significantly different

Job Recognition/Status/Respect Subscale

The job recognition/status/respect subscale concerned stressors about the working environment and inadequate salaries. On the TSI subscale concerning stress as related to job recognition/status/ respect, a significant difference was found for the educational levels of students taught by teachers (elementary, middle, high school). As noted in Table 21, which displays the results of the oneway ANOVA conducted on the job recognition/status/respect subscale scores as a function of the independent

variable of educational levels of students taught by teachers (elementary, middle, high school), the F statistic was significant ($F_{2, 415} = 5.77, p < .01$). Thus, a significant difference was found in stress, as measured by the job recognition/ status/respect subscale of the TSI and educational levels of students taught by teachers (elementary, middle, high school).

For the job recognition/status/respect subscale, Duncan's post hoc analysis was performed to determine where the significant difference existed. Results of the Duncan's multiple range tests are displayed in Table 22. Findings indicated that elementary teachers reported significantly less stress ($M = 20.22$) related to job recognition/status/respect than either high school teachers ($M = 22.44$) or middle school teachers ($M = 23.00$).

Table 21

Analysis of Variance Highlighting the Effects of the Job Recognition/Status/Respect Subscale of the Educational Levels of Students Taught by Teachers

	Sum of Squares	df	Mean Square	F	Sig
Between Groups	692.64	2	346.32	5.77	0.00*
Within Groups	24895.41	415	59.98		
Total	25588.05	417			

* $p < .05$

Table 22

Results of Duncan's Post Hoc Analysis of the Job Recognition/Status/Respect Subscale as Related to the Educational Levels of Students Taught by Teachers

Educational Levels	N	Subset for alpha = 0.05*	
		1	2
Elementary	170	20.22	
High School	84		22.44
Middle	164		23.00

*mean scores of groups in the same column are not statistically significantly different

On the TSI subscale concerning stress as related to job recognition/status/respect, a significant difference was found for educational levels of teachers (college degrees) between the categories of bachelor's, master's, or + 30 including the doctorate. As noted in Table 23, which represents the results of the oneway ANOVA conducted on the job recognition/status/respect subscale of the TSI as a function of the independent variable of educational level of teachers (college degrees), the F statistic was significant ($F_{2, 413} = 3.31, p < .03$). Thus, a significant difference was found in stress, as measured by the job recognition/status/respect subscale of the TSI and educational levels of teachers (college degrees).

For the job recognition/status/respect subscale, Duncan's post hoc analysis was done to determine where the significant difference existed. The results of the analysis are shown in Table 24. Findings indicated that teachers with bachelor's degrees ($M = 21.48$) and master's degrees ($M = 21.54$) reported significantly less stress than teachers with + 30 including the doctorate degree ($M = 24.87$) as related to the subscale of job recognition/status/respect.

Table 23

Analysis of Variance Showing the Effects of the Job Recognition/Status/Respect Subscale for the Educational Levels of Teachers

	Sum of Squares	df	Mean Square	F	Sig
Between Groups	401.18	2	200.59	3.31	0.03*
Within Groups	25021.57	413	60.58		
Total	25422.75	415			

*p < .05

Table 24

Results of Duncan's Post Hoc Analysis of the Subscale of Job Recognition/Status/Respect as Related to Educational Levels of Teachers

College Degrees	N	Subset for Alpha = 0.05*	
		1	2
Bachelor's	251	21.48	
Master's	126	21.54	
+ 30 including Doctorate	39		24.87

*mean scores of groups in the same column are not statistically significantly different

Workload Overload Subscale

An examination of items defining the workload overload subscale revealed issues and concerns about caseload or class size as being too big, too much paperwork, or just too little time to properly prepare for lessons and other responsibilities. On the TSI subscale workload overload, a significant difference was found for educational levels of students taught by teachers (elementary, middle, high school). As noted in Table 25, which displays the results of the oneway ANOVA conducted on the workload overload subscale of the TSI as a function of the

independent variable educational levels of students taught by teachers (elementary, middle, high school), the F statistic was significant ($F_{2, 415} = 3.34, p < .03$). Thus, a significant difference was found in stress, as measured by the workload overload subscale of the TSI and educational levels of students taught by teachers.

Duncan's post hoc analysis was performed to determine where the significant difference existed for the TSI subscale of workload overload. Table 26 contains the results for the Duncan's analysis. Findings indicated middle school teachers ($M = 26.26$) and high school teachers ($M = 27.07$) experienced significantly less stress than did elementary school teachers ($M = 28.74$) on the workload overload subscale of the TSI. High school teachers showed no significant difference in stress levels on the workload overload subscale compared to that of the other two groups (middle and elementary school teachers).

Table 25

Analysis of Variance Showing the Effects of the Workload Overload Subscale for the Educational Levels of Students Taught by Teachers

	Sum of Squares	df	Mean Square	F	Sig
Between Groups	529.72	2	264.86	3.34	0.03*
Within Groups	32827.82	415	79.10		
Total	33357.54	417			

* $p < .05$

Table 26

Results of Duncan's Post Hoc Analysis of the Subscale of Workload Overload as Related to the Educational Levels of Students Taught by Teachers

Educational Level	N	Subset for alpha = 0.05*	
		1	2
Middle	164	26.26	
High School	84	27.07	27.07
Elementary	170		28.74

*means scores of groups in the same column are not statistically significantly different

Time Management Concerns Subscale

The item content of the time management concerns subscale concerns stress-related time issues, such as inadequate time to get things done or over-committing oneself. On the TSI subscale of time management concerns, a significant difference was found for the levels of age (22-34 years, 35-47 years, 48 years and up) of teachers in relation to stress. As listed in Table 27, which represents the results of the oneway ANOVA conducted on the TSI scores as a function of the independent variable level of the three categories of age (22-34 years, 35-47 years, 48 years and up), the F statistic was significant ($F_{2, 407} = 3.86, p < .02$). Thus, a significant difference was found in stress, as measured by the time management concerns subscale of the TSI and levels of age.

Duncan's post hoc analysis was performed to determine where the significant difference existed for the time management concerns subscale. The results of the analysis are displayed in Table 28. Findings indicated teachers in the age group of 48 years and up reported significantly less stress ($M = 26.16$) than teachers in the

category of 35-47 years ($M = 29.42$). Teachers in the 22-34 years age group ($M = 28.17$) showed no significant difference in stress levels on the time management concerns subscale as compared to the other two age groups (35-47 years, 48 years and up).

Table 27

Analysis of Variance Showing the Effects of Time Management Concerns Subscale for the Levels of Age of Teachers

	Sum of Squares	df	Mean Square	F	Sig
Between Groups	740.10	2	370.05	3.86	0.02*
Within Groups	39018.11	407	95.86		
Total	39758.22	409			

* $p < .05$

Table 28

Results of Duncan's Post Hoc Analysis for the Subscale of Time Management Concerns as Related to the Levels of Age of Teachers

Age Groups	N	Subset for alpha = 0.05*	
		1	2
48 years and up	137	26.16	
22-34 years	136	28.17	28.17
35-47 years	137		29.42

*means scores of groups in the same column are not statistically significantly different

On the time management concerns subscale of the TSI, a significant difference was found for gender. As noted in Table 29, which displays the results of the t-test conducted on the TSI scores as a function of the independent variable

gender, the t statistic was significant [$t(415) = -2.07, p < .03$]. Thus, a significant difference was found in stress, as measured by the time management concerns subscale of the TSI and gender.

Table 29

t-test Showing the Effects of Time Management Concerns on Gender

Gender	t	df	Mean	Mean Difference	Sig
Males	-2.07	415	25.29	-2.91	0.03*
Females			28.20		

* $p < .05$

Psychological/Physiological Concerns Subscale

Item content of the psychological/physiological concerns subscale concerned feelings of anxiousness and vulnerability, as well as stomach pains and increased blood pressure. On the TSI subscale psychological/physiological concerns, a significant difference was found for gender.

As noted in Table 30, which displays the results of the t-test conducted on the TSI scores as a function of the independent variable gender, the t-statistic was significant [$t(415) = -2.09, p < .03$]. Thus, a significant difference was found in stress, as measured by the psychological/physiological concerns subscale of the TSI and gender.

Table 30

t-test Showing the Effects of Psychological/Physiological Concerns on Gender

Gender	t	df	Mean	Mean Difference	Sig
	-2.09	415		-2.71	0.03*
Males			18.34		
Females			21.05		

*p < .05

CHAPTER 5

SUMMARY, LIMITATIONS, IMPLICATIONS FOR EDUCATION, RECOMMENDATIONS FOR FURTHER RESEARCH

Summary

The purpose of the study was to examine the effects of seven independent variables in relation to stress in public school teachers in Louisiana. A descriptive/comparative design was utilized to test hypotheses. Alfred Adler's individual psychology theory was a major theoretical framework for this study. Adler not only emphasized social interest, but also discussed societal processes and interventions in order to prevent mental disorders (Ansbacher, 1992), which presumably includes the effects of high levels of occupation stress. In Adler's theory, social interest is positively associated with ability to cope with stress (Crandal, 1980). Adler (1956) emphasized three universal life tasks: (a) social living, (b) occupation, and (c) marriage. The present study emphasized two of these life tasks: (a) social living (e.g., studying the effects of social interest, age, gender, years of teaching experience, and type of student taught on stress) and (b) occupation (studying stress in the teaching occupation). In summary, Adler believed that the educational system

could be designed to prevent mental disorder, particularly through changes in teacher training (Ansbacher, 1992).

Utilizing the *Teacher Stress Inventory* (TSI), the researcher examined the relationship between the dependent variable of stress and the seven independent variables: (a) years of teaching experience, (b) educational levels of teachers (college degrees), (c) age, (d) gender, (e) social interest, (f) geographical location (North and South Louisiana), and (g) educational levels of students taught by teachers (elementary, middle, high school). The researcher used a convenience sampling procedure to select participants for this study. The participants for this study were teachers from three school districts in North Louisiana and three in South Louisiana. One school from each of three categories (elementary, middle, high school) was selected in each school district, for a total of eighteen schools represented. Teachers also completed the *Social Interest Scale*, a demographic questionnaire, and a participant consent form. Four hundred twenty three surveys were returned, with 218 from South Louisiana and 204 from North Louisiana. Teachers included 58 men and 360 women. Surveys were delivered, administered, and retrieved from each of the schools as directed by the school principals. No data were collected until this study was approved by the Human Use Committee at Louisiana Tech University.

All hypotheses were tested at a .05 level of significance. Hypotheses concerning the seven independent variables were analyzed using one way analysis of variance (ANOVA) or t-tests, with the findings as follows:

H1: There were no significant differences in stress, as measured by the TSI total scores across the four levels of years of experience (less than 5 years, 5-10

years, 11-24 years, and greater than 24 years). Thus, the null hypothesis was not rejected; therefore, research hypothesis 1 was not supported.

H2: There were no significant differences in stress, as measured by the TSI total scores across the three levels of educational level (bachelor's, master's, + 30 including doctorate). Thus, the null hypothesis was not rejected; therefore, research hypothesis 2 was not supported.

H3: There were no significant differences in stress, as measured by the TSI total scores across the three levels of age (22-34 years, 35-47 years, and 48 years and up). Thus, the null hypothesis was not rejected; therefore, research hypothesis 3 was not supported.

H4: There was no significant difference in stress, as measured by the TSI total scores for gender. Thus, the null hypothesis was not rejected; therefore, research hypothesis 4 was not supported.

H5: There was no significant difference in stress, as measured by the TSI total scores across the two levels of social interest. Thus, the null hypothesis was not rejected; therefore, research hypothesis 5 was not supported.

H6: There was no significant difference in stress, as measured by the TSI total scores across the two levels of geographical location (North and South Louisiana). Thus, the null hypothesis was not rejected; therefore, the research hypothesis 6 was not supported.

H7: There were no significant differences in stress, as measured by the TSI total scores across the three levels of educational level taught (elementary, middle,

high school). Thus, the null hypothesis was not rejected; therefore, research hypothesis 7 was not supported.

The finding that none of the seven research hypotheses were supported was unexpected. The researcher selected the seven independent variables because they appeared especially relevant to teacher stress. The researcher, for instance, expected to find that years of teaching experience would be one variable to show a difference. It was expected that teachers with less than five years would show more stress because of a lack of experience, workload issues, and classroom management concerns. Also, the researcher expected that teachers with higher college degrees would experience less stress, mainly because of greater exposure to techniques for managing classrooms, interpersonal communication, and problem solving. Also, age was expected to be inversely related to teacher stress. The researcher hypothesized that older teachers would experience less stress because greater life and work experiences would result in stronger support systems or better networking. Further, it was hypothesized that males would report less stress because of the presumption of better control of classroom management and pupil behavior, as well as due to the tendency for males to report less stress because of the lack of emotional expression associated with the traditional male gender role.

Concerning social interest, it was hypothesized that teachers with greater social interest would report less stress because, as Crandall (1980) reasoned, greater social interest is associated with more effective adjustment. The researcher definitely expected to find more stress associated with teachers living in South Louisiana, compared to teachers living in North Louisiana, because of the debilitating and

detrimental damage done the physical landscape of the southern part of the state by hurricanes Rita and Katrina, as well as the residual affects of this occurrence. Finally, the researcher expected to see greater stress reported by middle school teachers because of the psychological and social challenges associated with this developmental stage of students (Lord, Eccles, & McCarthy, 1994).

Because none of the research hypotheses were supported, the researcher elected to perform a more detailed study of the TSI to seek an explanation. Factor analysis of the 49 item TSI revealed that teacher stress is a multi-dimensional construct that is comprised of several factors (subscales). Based on factor analyses, five TSI factors or subscales were identified: (a) time management concerns, (b) job recognition/ status/respect, (c) workload overload, (d) classroom management, and (e) psychological/physiological concerns. Then, the seven independent variables were analyzed in relation to each of these five TSI subscales by ANOVA or t-tests, as appropriate. In cases of significant findings, Duncan's post hoc analysis was performed to clarify the specific nature of the significant differences. Findings are listed below.

Three significant differences were revealed on the TSI subscale of stress concerning Classroom Management.

1. Teachers with less than 5 years of teaching experience reported significantly greater levels of stress than did teachers with 5-10 years of experience, 11-24 years of experience, and greater than 24 years of experience on the subscale of Classroom Management. This is a reasonable finding because those teachers just beginning their teaching careers would have less

experience, which one could reasonably assume could lead to more difficulties with classroom management and pupil misbehavior. This finding could be useful and helpful to teacher training programs and school administrators, by identifying classroom management as a topic for training programs to help teachers stay in the profession longer. For example, Black (2003) stated that stressful working conditions can lead to a shortage of teachers available in the profession.

2. Age also showed significant differences on the Classroom Management subscale. For example, teachers in the age group of 22-34 years show higher levels of stress about classroom management compared to teachers in the 35-47 years age group. Once again, those younger teachers with less experience or less of a social network reported experiencing greater levels of stress about classroom management. This finding is consistent with Black (2003) who stated again that teachers with little experience are finding the teaching profession very distressing, resulting in many teachers leaving the field early.

3. Middle school and high school teachers reported significantly greater levels of stress than did elementary teachers on the Classroom Management subscale. It could be speculated that this is a result of elementary school students being more obedient to authorities and easier to manage than middle school or high school students.

The analysis of the TSI subscale of stress concerning Job Recognition /Status/ Respect showed two significant findings.

1. Results of Duncan's post hoc analysis indicated that middle and high school teachers reported significantly greater levels of stress as related to Job Recognition/Status/Respect subscale than did elementary school teachers. The researcher speculates that administrative support systems and mentoring programs may be more effective at the elementary level of teaching.

2. Teachers with their + 30 or the doctorate reported significantly greater levels of stress on the Job Recognition/Status/Respect subscale than teachers with bachelor's or master's degrees. These more highly educated teachers may have had unrealistic expectations of job advancement and job recognition that were not fulfilled after attaining their + 30 or the doctorate. Schools can be made healthier by providing positive feedback and praise. (Kyriacou, 2001) Also, schools need to institutionalize and enact policies that provide more respect for teachers, for this is a major area needing attention stated Botwinik (2007).

There was one significant finding concerning the TSI subscale of stress concerning Workload Overload.

1. Duncan's post hoc analysis findings indicated that elementary school teachers reported significantly greater levels of stress than did middle school teachers and high school teachers on the Workload Overload subscale.

Elementary school teachers, one could presumably conclude, have additional stressors such as having to be more nurturing and assistive to their students, as well as having larger class sizes, which could prove to be more stressful. For example, McLaughlin, et. al., (1986) reported that for elementary school

teachers, both class size and increased emotional needs of students leads to stressful situations.

The analysis of the TSI subscale of stress concerning Time Management Concerns revealed two significant differences.

1. Findings of Duncan's post hoc analysis indicated that teachers in the age group of 35-47 years reported significantly greater levels of stress than teachers in the age group of 48 years and up. Teachers in the 22-34 years age group showed no significant difference in stress levels on Time Management Concerns subscale as compared to the other two age groups. The researcher speculated that teachers in the age group of 48 years and up displayed less stress because they were more in control of their time, more prepared and experienced in their teaching routines and lesson plans, and more likely to have a stronger support system available to them. Veteran teachers in the 48 years and up age level may also have the advantage of a more developed collegial environment. Such an environment of collegiality not only benefits veteran teachers; it also provides a two-way exchange to take place that can contribute to job satisfaction. (Boreen & Niday, 2000)

2. Findings indicated a significant gender difference in stress on the Time Management Concerns subscale of the TSI. Females reported significantly greater levels of stress than males in relation to Time Management Concerns. The researcher speculated that males tend to rationalize and operationalize more efficiently; whereas, females may be more likely to invest more time and energy into daily lesson plans, thus taking more time and energy out of

their days. Also, female teachers may be more vulnerable to work-family spillover, resulting in greater time constraints. Married female teachers are often still expected to do the majority of housework, food preparation, and child care. Calabrese (1987) reports that female teachers have significantly more stress than males because of work load/job role conflict and raising families, thus leading to increased stresses, such as time constraints. For instance, he states that heavy work loads for female teachers leaves little time to properly prepare for lessons or correct papers, thus carrying over to the home. Calabrese (1987) states that school organizations need to provide day care centers and workload schedules that do not require the female teachers to continue working at home. Time management seminars and workshops could provide teachers with opportunities for developing more productive work-place environments according to Murphy & Sauter (2003).

The analysis of the TSI subscale of stress concerning Psychological/Physiological Concerns revealed one significant finding.

1. Females on the Psychological/Physiological Concerns subscale of the TSI reported significantly greater levels of stress than males. This finding is reasonable because females tend to make more of an emotional investment in their students; males tend to be more distant and removed from their students as males tend to show emotions at a lower level. The researcher speculated that such an emotional investment can lead to more physiological and/or psychological demands on ones time and commitments. Teachers, according to Lamb, need to be encouraged to

help prevent stress by getting additional rest, making a change, and not volunteering for every committee, to start.

Because of these different findings on the different TSI subscales, the researcher concluded that teacher stress is not a singular variable that can be easily assessed by a single score based on a multiple item assessment such as the TSI, but is much more of a multi-dimensional variable. This may be the most important finding in the study. For example, the overall measure of teacher stress showed no significant differences across the seven independent variables; however, significant differences were found when the different subscale dimensions were used as separate variables. Hence, the study of teacher stress as assessed by these different subscales can lead to greater understanding of teacher stress and to more important and relevant future research.

Limitations

One limitation of this study concerned the problems typically associated with a self-reported survey. The researcher trusted that each participant being surveyed would respond with full candor and complete discretion. Though each teacher was guaranteed complete confidentiality in completing the surveys, some teachers may have been apprehensive about being completely truthful for fear of reprisals or concerns about disclosing personal information. For instance, some teachers may not feel comfortable providing information that others could conceivably have access to.

Another possible limitation was that only public school teachers in Louisiana were selected for this study, and more specifically, only three public school districts in North Louisiana and three in South Louisiana were chosen. This limitation could

be seen as a geographical limitation, which would prevent one from making valid generalizations to other regions or sections of the country. Also, generalizations may be limited to types of schools. For example, these findings may not apply to private or parochial schools, which were not represented in this sample.

Response bias could be another limitation. Personal feelings or attitudes towards surveys could definitely influence results of the survey. The format and content of the instruments could have stirred emotional or professional resentment, thus affecting the way in which the respondent answered certain questions. For instance, the survey may have been viewed as too long or too personal. Also, misunderstanding or confusion as to what the instruments were asking could have limited accurate responses.

A major limitation could also have included the additional administrative expectations or requirements to completing the survey. Ordinary paperwork, forms, duty, and other responsibilities already constitute a large workload for teachers, and asking teachers to complete a survey could add an additional stressor which can easily be a limitation. For teachers already experiencing time constraints and growing demands, their participation in an additional study puts them in more stressful situations. (Colgan, 2003)

Implications for Education

Based on the review of literature, findings of this study, and conclusions, the following implications are suggested:

1. Professional development opportunities could be further explored to help to alleviate stressful occurrences in schools. Murphy and Sauter (2003) suggest

the use of stress interventions, such as stress management workshops and conflict resolution training to help teachers deal with stress.

2. Principals and other administrators can play an important role in stress reduction by making changes and incorporating suggestions to improve workplace settings. For instance, Sarros and Sarros (1987) report that administrators can distribute work loads more equitably to relieve stress and tension and to reduce work loads to manageable levels.
3. Allowing teachers to have more autonomy and decision-making capacity may aid in alleviating stressful environments. Hansen and Sullivan (2003) found that stress can be reduced by lowering demands on teachers and sharing responsibilities and demands more equitably.
4. New teachers entering the profession can be given more assistance and can be provided with mentoring programs that will help to deal with the stressors of teaching. For instance, Boreen and Niday (2000) report that even before new teachers begin teaching in their new schools on the first day, a two-way exchange should take place with the veteran teachers. Both new teachers and veteran teachers can learn from each other through mentoring programs and teacher workshops. By providing more supportive situations within their schools, less stressed environments can be created, and more productive, healthy atmospheres can be provided.

Recommendations for Further Research

The following recommendations for future research are made based on the limitations, conclusions, and findings of the study and the literature review:

1. Further research should focus on the multi-dimensional aspects of stress, such as workload overload, since the researcher found that elementary school teachers were reporting more stress than their counterparts in the middle and high schools in this area. For example, Liston (2000) states that a restructuring of school settings is not only needed, but required if we are to attain more positive teaching environments in our schools.
2. Research could also focus more closely on time management, because teachers in the age of 25-47 showed significantly greater levels of stress on this subscale. Abel and Sewell (1999) found that one of the greatest stressors that teachers face is constant time pressures to complete their work.
3. Further research should also focus on the areas of job recognition and respect of teachers. Middle school and high school teachers have reported greater levels of stress in this area. Further research could provide ways to alleviate stressful situations. For instance, changing the educational setting by providing rewarding and challenging work environments is an important way to achieving higher levels of performance and personal satisfaction, according to Murphy and Sauter (2003).
4. The area of classroom management is another recommended topic for future research, for this is a point of concern, particularly for teachers with less than five years of experience. Woods and Weasmer (1997) report that mentoring programs and collegial work environments should be commonplace when new teachers enter the profession.

5. There is clearly a need to assess and conceptualize teacher stress as a multi-dimensional construct, rather than as a single dimensional construct. Stress is manifest in different ways for teachers of different gender, age, years of experience, educational level, and levels of students taught.

6. Finally, other independent variables can be studied in relation to teacher stress. One such independent variable is socio-economic levels of students. Another possibility could be to study the effects of teacher stress in inner city, rural, and suburban school environments. An additional study on teacher stress could be to study its effects depending on various intellectual levels of students, such as honor students or gifted students.

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APPENDIX A

DEMOGRAPHIC SHEET

SECTION III:

Please respond to the following questions as directed:

Number of years you have taught, including 2009:

What is your age?

What level of students do you teach? (Please choose one.)

_____ Elementary

_____ Middle School/Junior High

_____ High School

What is the highest degree that you have attained? (Please check your response.)

_____ Bachelors

_____ Masters

_____ Plus 30 or greater (including Doctorate)

What is your gender? _____ M _____ F

Thank you for your assistance in this project!

APPENDIX B

TEACHER STRESS INVENTORY

Teacher Inventory

Section I:

Directions: Read each statement and then decide how “noticeable” it is to you. The numbers indicate the level of noticeability. Circle the number that best describes your feelings.

- 1 = Not Applicable
- 2 = Barely Noticeable
- 3 = Moderately Noticeable
- 4 = Very Noticeable
- 5 = Extremely Noticeable

CIRCLE

- | | | | | | |
|--|---|---|---|---|---|
| 1. There is little time to prepare for my lessons/responsibilities. | 1 | 2 | 3 | 4 | 5 |
| 2. My personal priorities are being shortchanged due to time demand. | 1 | 2 | 3 | 4 | 5 |
| 3. I have too much work to do. | 1 | 2 | 3 | 4 | 5 |
| 4. My caseload/class is too big. | 1 | 2 | 3 | 4 | 5 |
| 5. The pace of the school day is too fast. | 1 | 2 | 3 | 4 | 5 |
| 6. There is too much administrative paperwork in my job. | 1 | 2 | 3 | 4 | 5 |
| 7. I lack promotion and/or advancement opportunities. | 1 | 2 | 3 | 4 | 5 |
| 8. I am not progressing in my job as rapidly as I would like. | 1 | 2 | 3 | 4 | 5 |
| 9. I need more status and respect on my job. | 1 | 2 | 3 | 4 | 5 |
| 10. I lack recognition for the extra work and/or good teaching I do. | 1 | 2 | 3 | 4 | 5 |
| 11. My personal opinions are not sufficiently aired. | 1 | 2 | 3 | 4 | 5 |
| 12. I receive an inadequate salary for the work I do. | 1 | 2 | 3 | 4 | 5 |
| 13. I lack control over decisions made about classroom/school matters. | 1 | 2 | 3 | 4 | 5 |
| 14. I am not emotionally/intellectually stimulated on the job. | 1 | 2 | 3 | 4 | 5 |
| 15. I lack opportunities for professional improvement. | 1 | 2 | 3 | 4 | 5 |

I feel frustrated...

- | | | | | | |
|---|---|---|---|---|---|
| 16....having to monitor pupil behavior. | 1 | 2 | 3 | 4 | 5 |
| 17....because of discipline problems in my classroom. | 1 | 2 | 3 | 4 | 5 |
| 18....attempting to teach students who are poorly motivated. | 1 | 2 | 3 | 4 | 5 |
| 19....because some students would do better if they tried harder. | 1 | 2 | 3 | 4 | 5 |
| 20....because of inadequate/poorly defined discipline policies. | 1 | 2 | 3 | 4 | 5 |
| 21....when my authority is rejected by pupils/administration. | 1 | 2 | 3 | 4 | 5 |

I respond to stress...

- | | | | | | |
|--|---|---|---|---|---|
| 22....by feeling insecure. | 1 | 2 | 3 | 4 | 5 |
| 23....by feeling unable to cope. | 1 | 2 | 3 | 4 | 5 |
| 24....by feeling vulnerable. | 1 | 2 | 3 | 4 | 5 |
| 25....by feeling depressed. | 1 | 2 | 3 | 4 | 5 |
| 26....by feeling anxious. | 1 | 2 | 3 | 4 | 5 |
| 27....by calling in sick. | 1 | 2 | 3 | 4 | 5 |
| 28....by using prescription drugs. | 1 | 2 | 3 | 4 | 5 |
| 29....by using over-the-counter drugs. | 1 | 2 | 3 | 4 | 5 |
| 30....with rapid and/or shallow breath. | 1 | 2 | 3 | 4 | 5 |
| 31....by using alcohol. | 1 | 2 | 3 | 4 | 5 |
| 32....with feeling increased blood pressure. | 1 | 2 | 3 | 4 | 5 |
| 33....with feelings of heart pounding or racing. | 1 | 2 | 3 | 4 | 5 |
| 34....with stomach pain of extended duration. | 1 | 2 | 3 | 4 | 5 |
| 35....with stomach cramps. | 1 | 2 | 3 | 4 | 5 |

- | | | | | | |
|--|---|---|---|---|---|
| 36....with physical exhaustion. | 1 | 2 | 3 | 4 | 5 |
| 37....with physical weakness. | 1 | 2 | 3 | 4 | 5 |
| 38....by becoming fatigued in a very short time. | 1 | 2 | 3 | 4 | 5 |
| 39....with stomach acid. | 1 | 2 | 3 | 4 | 5 |
| 40....by sleeping more than usual. | 1 | 2 | 3 | 4 | 5 |
| 41....by procrastinating. | 1 | 2 | 3 | 4 | 5 |
| 42....I rush in my speech. | 1 | 2 | 3 | 4 | 5 |
| 43....There isn't enough time to get things done. | 1 | 2 | 3 | 4 | 5 |
| 44....I have to try doing more than one thing at a time. | 1 | 2 | 3 | 4 | 5 |
| 45....I become impatient if others do things too slowly. | 1 | 2 | 3 | 4 | 5 |
| 46....I have little time to relax and enjoy the time of day. | 1 | 2 | 3 | 4 | 5 |
| 47....I easily over commit myself. | 1 | 2 | 3 | 4 | 5 |
| 48....I think about unrelated matters during conversations. | 1 | 2 | 3 | 4 | 5 |
| 49....I feel uncomfortable wasting time. | 1 | 2 | 3 | 4 | 5 |

APPENDIX C

SOCIAL INTEREST SCALE

SECTION II:

Below are a number of pairs of personal characteristics or traits. For each pair, choose the trait which you value more highly. In making each choice, ask yourself which of the traits in that pair you would rather possess as one of YOUR OWN characteristics. For example, the first pair is "imaginative-rational." If you had to make a choice, which would you rather be? Write 1 or 2 on the line in front of the pair to indicate your choice.

Some of the traits will appear twice, but always in combination with a different other trait. No pairs will be repeated.

Be sure to choose ONE trait in EACH pair!

"I would rather be....."

_____ 1. imaginative
_____ 2. rational

_____ 1. neat
_____ 2. logical

_____ 1. helpful
_____ 2. quick witted

_____ 1. forgiving
_____ 2. gentle

_____ 1. neat
_____ 2. sympathetic

_____ 1. efficient
_____ 2. respectful

_____ 1. level-headed
_____ 2. efficient

_____ 1. practical
_____ 2. self-confident

_____ 1. intelligent
_____ 2. considerate

_____ 1. alert
_____ 2. cooperative

_____ 1. self-reliant
_____ 2. ambitious

_____ 1. imaginative
_____ 2. helpful

_____ 1. respectful
_____ 2. original

_____ 1. realistic
_____ 2. moral

_____ 1. creative
_____ 2. sensible

_____ 1. popular
_____ 2. conscientious

_____ 1. generous
_____ 2. individualistic

_____ 1. considerate
_____ 2. wise

_____ 1. responsible
_____ 2. likable

_____ 1. reasonable
_____ 2. quick-witted

_____ 1. capable
_____ 2. tolerant

_____ 1. sympathetic
_____ 2. individualistic

_____ 1. trustworthy
_____ 2. wise

_____ 1. ambitious
_____ 2. patient

APPENDIX D

PARTICIPANT CONSENT FORM

Participant Consent Form

Thank you for taking the time to participate in this survey. Your input and assistance is very much appreciated and will be used to assist educators in evaluating stress levels of teachers. Please provide your signature below as a participant in this study.

Title of Project: Predictor variables associated with teacher stress levels

Procedure: Teachers in selected school districts will voluntarily complete a packet of surveys dealing with demographic information, stress inventory, and social interest scale questions. Data will be analyzed to determine the relationship among the variables.

I, _____, attest with my signature that I have read and understand the description of the study, "Predictor variables associated with teacher stress levels," and its purposes and methods. I understand that my participation is strictly voluntary and in no way will be reported to the school. I understand that I may withdraw at any time or refuse to answer any questions without penalty. I also understand that the results will be freely available to me upon request. I understand that the results of the survey will be confidential, anonymous, accessible only to principal investigators, myself, or a legally appointed representative. Neither my participation or lack of participation will be shared with the school. Participation will not impact my grades or employment in any way. I have not been requested to waive nor do I waive any of my rights related to participating in this study.

Signature of participant

Contact Information: The principal experimenters listed below may be reached to answer questions about the research, subject's rights, or related matters.

Barry J. Morales, 318-257-3479
Dr. Randy Parker, 318-257-2834

APPENDIX E

HUMAN USE COMMITTEE FORM



LOUISIANA TECH
UNIVERSITY
MEMORANDUM

OFFICE OF UNIVERSITY RESEARCH

TO: Mr. Barry Morales
FROM: Barbara Talbot, University Research
SUBJECT: HUMAN USE COMMITTEE REVIEW
DATE: April 27, 2009

In order to facilitate your project, an EXPEDITED REVIEW has been done for your proposed study entitled:

“Predictor Variables Associated with Teacher Stress Levels”

HUC-639

The proposed study's revised procedures were found to provide reasonable and adequate safeguards against possible risks involving human subjects. The information to be collected may be personal in nature or implication. Therefore, diligent care needs to be taken to protect the privacy of the participants and to assure that the data are kept confidential. Informed consent is a critical part of the research process. The subjects must be informed that their participation is voluntary. It is important that consent materials be presented in a language understandable to every participant. If you have participants in your study whose first language is not English, be sure that informed consent materials are adequately explained or translated. Since your reviewed project appears to do no damage to the participants, the Human Use Committee grants approval of the involvement of human subjects as outlined.

Projects should be renewed annually. *This approval was finalized on April 15, 2009 and this project will need to receive a continuation review by the IRB if the project, including data analysis, continues beyond April 15, 2010.* Any discrepancies in procedure or changes that have been made including approved changes should be noted in the review application. Projects involving NIH funds require annual education training to be documented. For more information regarding this, contact the Office of University Research.

You are requested to maintain written records of your procedures, data collected, and subjects involved. These records will need to be available upon request during the conduct of the study and retained by the university for three years after the conclusion of the study. If changes occur in recruiting of subjects, informed consent process or in your research protocol, or if unanticipated problems should arise it is the Researchers responsibility to notify the Office of Research or IRB in writing. The project should be discontinued until modifications can be reviewed and approved.

If you have any questions, please contact Dr. Mary Livingston at 257-4315.

APPENDIX F

VITA

VITA

Spring 2010

BARRY J. MORALES

Louisiana Tech University
Division of Student Affairs
Student Development
P.O. Box 8578-Tolliver Hall
Ruston, LA 71272
Tel: 318-257-3479
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1415 W. Kentucky Avenue
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EDUCATION

Master of Arts, Industrial/Organizational Psychology – Louisiana Tech University, 2002

Education Specialist Degree, Educational Administration – Louisiana State University – Baton Rouge, 2000

Master of Arts, General Counseling – Louisiana Tech University, 1989

Bachelor of Arts, English Education, Psychology – Louisiana Tech University, 1988

PROFESSIONAL DEVELOPMENT

Service

Chair of the Student Organizations Committee – 2001-2010

Chair of the Behavioral Standards Committee – 2001-2010

Chair of the Organization Grant Committee – 2001-2010

Committee member of the Off-Campus Appeals Committee – 2005-2010

Chair/Committee member of an educational curriculum review committee – 2008

Chair/Committee member of various job search committees – 2001-2010

Committee member of the Student Retention Committee/Sub-Committee – 2008

Committee member of the Student Government Association Mentoring Program – 2007

Planning committee member for the SGA Big Event community project – 2004-2010

University Advisor to the Student Government Association, Union Board, KLPI – 2001-2010

Continuing Education

Various workshops and programs dealing with student behavior, student conduct, alcohol and drug usage among college students, hazing, and honor code violations

Affiliations

Association for Student Conduct Administration – ASCA
Louisiana Association of College and University Student Personnel Administrators –
LACUSPA
National Association of Campus Activities – NACA
Association of College Unions International – ACUI
Association for the Promotion of Campus Activities – APCA

COLLEGE TEACHING/ADMINISTRATOR EXPERIENCE

Fall 2001 – 2010 Director of Student Development – Louisiana Tech University

Fall 2001 – 2010 College of Education Instructor – Louisiana Tech University

University Seminar 101

Reading 200

PREVIOUS TEACHING EXPERIENCE

1998 – 2000 Archbishop Shaw High School – English teacher, counselor,
administrator, coach

1989 – 1998 Jesuit High School – English teacher, counselor, administrator, coach

REFERENCES

Dr. David Gullatt, Professor and Dean, College of Education - Louisiana Tech University

Dr. James King, Vice President of Student Affairs – Louisiana Tech University

Dr. Linda Griffin, Dean of Student Development – Louisiana Tech University