

CONSEQUENCES OF STRESS
FOR PUBLIC SCHOOL
SUPERINTENDENTS

By

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CHAPTER I

CONSEQUENCES OF STRESS FOR PUBLIC SCHOOL SUPERINTEENDENTS

I. INTRODUCTION

Employees who hold high stress, high demand jobs often report diminished mental or physical health (Botts, 1986; Peterson, 2003). This diminished health can be assumed to cause personal discomfort or sufferings for the employee, but studies have shown that the employee's job performance suffers as well (Johnston, Weterfield, Momin, Phillipi, & Naidoo, 2009). Poor health has other consequences for employees including increased absenteeism or the inability to maintain the position, they currently occupy. Reports of poor health related to a particular profession have a negative influence on others seeking the same type of job (Glass, 2007).

Studies focus on how the mental health issues document mild symptoms such as depression, anxiety, irritability or burn-out, but symptoms may progress to more serious issues such as substance abuse or possible suicidal thoughts and actions (Peterson, 2003; Welch, 2004). Some of the physical health issues noted in studies were heart disease, diabetes or weight gain. In addition, poor healing and recovery from diseases due to an impaired immune system have been noted (Baum & Posluszny, 1999; Rice, 2000).

Several studies document that job stress experienced in many professions plays a large role in contributing to declining physical and mental health (Baum & Posluszny, 1999; Johnston et al., 2009; Peterson, 2003). Excessive job stress has been documented in many high level professions such as law enforcement, the medical profession and corporate administrative jobs. One high level, high stress job that has become even more stressful in recent years is the public school superintendent (Glass, 2007).

Glass (2007) reported that nearly 60% of superintendents experience considerable or great stress on the job. Stress is a multidimensional factor that needs more study to determine the specific causes of the stress related to the job and the implications of that stress on superintendents and their mental and physical health.

Job Related Health Issues

High level jobs have been shown to adversely affect the mental health or physical health of employees in many fields. Poor mental or physical health can have serious consequences for both the employee and the employer (Johnston et al., 2009) People who hold high level positions have been shown to have greater incidences of disease such as heart disease or diabetes, more depression, and poorer decision making capabilities (Berkly, 2002; Peterson, 2003). Absenteeism related to poor health is extremely costly for employers, but “presenteeism, which is defined as being at work, but working at a reduce capacity” (Mattke, Balalrosjnan, Giacomo & Newberry, 2007, p. 211) is also a problem for the employer and the employee.

Diminished mental health can be manifested in several ways including, but not limited to, depression, anxiety, emotional disorders and other mental health disorders. Just as physical health issues cost employers so do mental health problems. A single

episode for one employee can cost \$1646, making mental health issues the fifth most costly disease to employers (Johnston, Westerfield, Momin, Phillipi, & Naidoo, 2009).

Some of the physical health complaints related to job stress were high blood pressure, inability to sleep, diabetes, and the inability to heal once diagnosed with a disease such as cancer or HIV. This inability to heal is due to impairments in the immune system which also make one susceptible to other diseases (Rice, 2000). Physical health issues were documented in a Swedish study done by Josephson, Lindberg, Voss, Alfredsson, and Vingard, (2008) as the key factor in excessive absenteeism among nurses. In the study which followed a group of nurses for three years, 16% were absent due to illness 28 days or more days in that time frame and 18% left their jobs within the three year period. Mental and physical health issues affect the workers who hold high level positions for many reasons and the causes of those health issues come from many sources, but job stress is documented as possibly the most prevalent cause (Johnston, et al., 2009).

Stress Effects on Health

People who hold high level positions have been shown to experience high stress levels that are often manifested in disease or symptoms of disease (Johnston, et.al., 2009). Examples of how stress manifests itself both mentally and physically include a greater incidences of heart disease or diabetes, more depression, and poorer decision making capabilities due to stress (Berkley, 2002; Peterson, 2003,). Decreased productivity, increased absenteeism, increased anxiety or fatigue and weight gain are other examples. The endocrine system is also affected by stress and that can impact adversely impact the levels of both good and bad cholesterol. This in turn creates additional health issues

(Peterson, 2003). Stress causes issues that range from mild symptoms and illness to serious long term diseases or suicidal thoughts and in some cases stress can be debilitating (Rice, 2000).

Some of the symptoms of stress can be manifested in physical symptoms that include palpitations, headaches, insomnia, intestinal cramping, lightheadedness, dysphasia (difficulty speaking), grinding of one's teeth during sleep, or shortness of breath (Rice, 2000). These symptoms are usually noted during bouts of acute stress. Prolonged stress may manifest in conditions such as high blood pressure, heart or kidney disease, inflammatory diseases, sexual dysfunction, a compromised immune system, arthritis, or other diseases (Rice, 2000). If stress is prolonged or when diverse situations are faced, individuals can experience negative consequences to their health (Criswell, 2000; Rice, 2000; Ursin, 2004). Ursin (2004) expanded his studies of stress to include the life style choices that people make while trying to cope with stress. These life style choices often lead to poor choices that in turn cause more health issues. Poor lifestyle choices that can further impair ones health may include things like smoking, drinking, inactivity, poor diet or the use of drugs. Criswell (2007) noted similar findings in her study and added that stress can also cause increased absenteeism and a high turnover rate among superintendents. Other studies indicate there is a relationship between stress and the development of some types of cancer and the progression of HIV (Baum & Posluszny, 1999; Olf, 1999).

Studies have linked stress to both mental and physical health issues (Hobson, 2001; Kowlaski 1999; Rice, 2000; Sharp & Walter, 1997). Experiencing prolonged high levels of stress, even when individuals like their jobs, can negatively affect the physical

and mental health of the employee (Welch, 2004, Baum & Posluszny, 1999, Sharp & Walter, 1997). Baum and Posluszny (1999) documented three ways that prolonged stress can affect a person. The first area it affects someone is through biological changes that include increase blood pressure, heart disease and immune system changes that can lead to disease and illness. Second is the effect on one's behaviors, or lifestyle choices. These may include inactivity, drinking, smoking or risky behaviors that may lead to disease. The third way prolonged stress can affect a person is through behavioral influence. This is not the behaviors we choose, but the confusion of symptoms and causes of illness that may occur with those behaviors. For example, when the symptoms of stress mask or camouflage the symptoms of disease causing an incorrect or a missed diagnosis. This can have serious implications on the health of an individual.

Causes of Superintendent Stress

There are many possible causes of job stress for superintendents. Stress can result from the political issues, inadequate funding, social isolation, school board micromanagement, multiple job descriptions, federal and state mandates, and unrealistic expectations from various outside groups. Studies have shown that high levels of stress, from any source can cause high blood pressure, heart disease, some cancers and other physical health issues (Botts, 1986; Peterson, 2003; Rice, 2000; Welch, 2004). Stress is experienced in all professions, but studies indicate there is a considerable amount of stress for superintendents and it seems to be increasing. According to Glass (2007) in his mid-term study of public school superintendents nearly 60% of superintendents in his study experienced great or considerable stress, which is an increase from approximately 52% in 2000. In a two state study on the health of superintendents, Sharp and Walter

(1997) found that the majority of superintendents reported that prolonged stress adversely affected their physical and mental health. Invancevich and Matteson (1980) explained that increased stress may be due to the great amount of time one spends on the job; more hours are spent at work than anywhere else.

Some superintendents have expressed increased stress on the job due to funding shortages and new legislative mandates such as NCLB (Welch, 2004). Another cause of stress is the increasingly political environments schools have become in today's society. Public schools have long been known as a somewhat political environment, an environment where there "is ample opportunity for superintendents to make enemies, but few chances to make friends" (McGhee, 2003, p. 24). This political environment is a tremendous source of stress (McGhee, 2003).

Another factor contributing to the stress of superintendents is their relationship with boards of education. Many superintendents who are nearing retirement or those who have been in position for many years, believe the superintendent is in charge of the day-to-day operations of the school district. A changing breed of boards has altered the traditional method of running a school. In many districts, it is no longer the case that the superintendent's recommendations are automatically approved (McGhee, 2003; Fusarelli, 2004).

Today's school boards are more political and involved in the daily operations of the school, which can create stress especially for superintendents who have been in the job for many years (Fusarelli, 2004; Yee, 1996). There is often a fine line that separates the role of the superintendent and the role of the board, so the superintendent must work to establish his/her role as well as that of the school board (Welch 2004).

Superintendents must learn early in their careers that relationships with the school boards are most critical to their success (Welch, 2004). In addition to board relationships, studies show that community relations are also a key part of a superintendent's job. Trying to meet the needs and desires of many constituencies is a source of stress for many superintendents (Criswell, 2007; Peterson, 1993; Welch, 2004).

Superintendents often get caught up in striving to be successful in their jobs, and it can cost them personally (Lawson, 1999). While the majority of superintendents currently in the position say they would choose to be a superintendent again (Glass 2007), fewer are interested in seeking the position for the first time (Carter & Cunningham, 1997).

NCLB mandates have forced many superintendents to become instructional leaders, and many superintendents are not prepared to be instructional leaders of the school (Peterson, 2003). Communities want to be involved in the decision making of the school by way of town meetings, attending board meetings and providing input to teachers and administrators. The changes in attitude of the communities and parents, the change in the superintendent's role and a new breed of school board members often combine to produce retirement for those who are nearing the end of their careers or a job change for superintendents who cannot yet retire (Crane, 2006).

In addition to current superintendents leaving the job early, one of the most significant factors contributing to a shortage of new superintendents is fewer qualified candidates are applying for the job because of the stress that is connected to the job (Crane 2006). Providing data that may be beneficial in managing stress and improving superintendent's health may encourage superintendents in Oklahoma to forego retirement

even with the incentives available to them through Oklahoma's retirement system. This system allows superintendents to retire earlier; making retirement easier for younger superintendents (Oklahoma Government, 2007). Stress and its effects have been shown to have an impact on the longevity of someone staying in a position (Welch, 2004). An increased shortage of future candidates could be influenced by the possible health risks he/she faces when he/she accepts the position (Oklahoma Gov., 2007; Passalacqua, 2007). Early retirement is increasing because the population of superintendents is aging. This is of concern because the average age of current superintendents is between 54 and 55 years, the oldest average reported in the Glass survey since the centennial studies by the American Association of School Administrators study began in 1923 (Glass, 2007). It is assumed that as superintendents near retirement, they are less willing to stay in high stress jobs that may affect their health, when retirement may be a more appealing option.

Job stress is a multidimensional variable that has not been studied in specific enough terms to provide data that would help manage the stress in the profession of public school superintendents. The tasks, interruptions, relationships and all of the specifics causes of stress can be placed into one of the four factors of stress used in this study. Koch, Gmelch, Tung and Swent (1982) developed an instrument to measure stress specifically for administrative positions in the public schools. This instrument was derived based on self reported causes of stress which could be categorized into one of four specific stress factors. The four factors are role based, task based, boundary spanning and conflict mediating stress.

Role-based stress can be caused by confusion about the role the superintendent needs to take while performing his/her job. There is often confusion about the role the

superintendent should perform within the district. Task-based stress is stress that may result from not having the skills to do a particular job or part of a job thus causing insecurities and a feeling of incompetence for the superintendent. It can also occur when time or resources prevent one from completing the task adequately. Boundary spanning stress results from dealing with entities outside the school itself such as parents or community members. Conflict mediating stress occurs from conflicts that occur within the school environment itself, such as conflicts that may occur with staff or students. This stress may be seen in district that negotiate (Koch et. al., 1982).

Purpose of the Study

The purpose of this quantitative study is to explore the relationship of the four stress factors, boundary-spanning stress, conflict-mediating stress, role-based stress and task-based stress to the mental health and physical health of public school superintendents. The factors will be used as the framework to answer the following questions:

Research Questions:

1. Is there a relationship among the four stress factors and the mental health of a public school superintendent?
2. Is there a relationship among the four stress factors and the physical health of a public school superintendent?
3. Do the four stress factors impact or predict the mental health of a public school superintendent?
4. Do the four stress factors impact or predict the physical health of a public school superintendent?

5. Which of the four stress factors is a stronger predictor of the mental health of a public school superintendent?
6. Which of the four stress factors is a stronger predictor of the physical health of a public school superintendent?

These research questions are based on the theories of stress and the four stress factors developed by Koch et al. (1982). Data was collected in an effort to answer these research questions using the theories of stress as a guideline.

Definition of Terms

1. Variables: The four factors of stress as measured by the Administrative Stress Index: Role-Based stress, Task-Based stress, Conflict-Mediating stress and Boundary-Spanning stress. Two additional variables are mental health and physical health as measured by the SF-36v2 (Ware, 2000).
2. Stress and job stress: Terms used synonymously in this study to refer to the discomfort an individual experiences if he/she doubts his/her ability to respond appropriately to a demand, and the fear of negative consequences for an inappropriate response in the job setting. The definition of stress/job stress for this study is a combination of definitions used in previous studies (Gmelch, 1996; Koch, et al. 1982; Selye, 1984). Stress will be expressed by scores obtained on the Administrative Stress Index.
3. Administrative Stress Index is a multidimensional survey instrument designed to measure job related stress experienced specifically by school administrators (Koch et al., 1982).

4. SF-36v2 is a generic short-form (SF) multipurpose health survey designed to measure functional status and general mental and physical health status (Ware, 2000).
5. Physical health is defined for the purpose of this study as the performance of physical activities such as walking, climbing stairs, self care activities and vigorous activities for an amount of time desired by the individual (Ware, 2000).
6. Mental health is the intellectual status of a person, cognitively, emotionally and psychologically (Ware, 2000).
7. Superintendent is the term used to describe the administrative head of a public school system, who directs and manages the day to day operations of the school. In Oklahoma this person may concurrently function as the principal and superintendent.
8. Public school refers to one of the 532 publicly funded schools located in the state of Oklahoma.
9. Role-based stress is one of the four stress factors measured by the Administrative Stress index. It is the role based beliefs, interactions or attitude about their administrative role in the school (Koch, et al. 2000).
10. Task-based stress is a second stress factor measured by the Administrative Stress Index and is defined as the day to day tasks performed as the school administrator (Koch, et al. 2000).
11. Boundary-spanning stress is the third stress factor measured by the Administrative Stress Index. This factor refers to the relationship of the administrators activities

required to relate the school to the environment outside school itself (Koch et al., 2000).

12. Conflict-mediating stress is the fourth factor measured by the Administrative Stress Index. This factor refers to the stress that may arise from resolving conflicts between parties within the district, community and the school board. (Koch, et al. 2000).

Significance of the Study

A study of the relationship between stress and the mental health and physical health of superintendents may provide the basis for improving both the mental health and physical health of public school superintendents. The relationship of job stress and mental health and physical health can affect many factors related to recruiting and retention of quality superintendents. The rationale for this study is to contribute data that will facilitate stress management through understanding the factors that contribute most to stress and the relationship to one's health. The data obtained can be used by the superintendent to be proactive in controlling his/her own stress or by boards and organizations that work with superintendents in preventing the early retirement or exit of superintendents from the job. The data may also be useful to school boards in recruiting and retaining quality superintendents.

Assumptions

Assumptions for this study are that the instruments were reliable, the respondents were honest and accurate in their responses, and the data collected was sufficient for the study.

The Administrative Stress Index has been used in other studies and was field tested at the time of its development and assumed to be reliable (Botts, 1986; Criswell, 2007; Koch, 2000). The SF-36v2 is used in medical practices to measure mental health and physical health. The scores compiled for numerous groups have been reviewed and have been shown to be reliable (Ware, 2000). The surveys were completed anonymously and online by professionals who volunteered to participate thus increasing the level of accurate and honest responses.

Limitations

Limitations of this study are associated with the demographic information collected. No information was collected related to gender or ethnicity which limits the use of the collected data in reference to those factors. Approximately thirty percent of the population responded to the survey, which is a smaller number than desired, but adequate for the study. Oklahoma superintendents were the only group to participate which may limit the generalization of the study results.

It should be noted that the age category for the age group of 50-59 years was omitted in error during the development of the survey. Several participants notified the researcher regarding how they had handled the omission. That information was taken into consideration when analyzing the data for demographics.

Organization of the Study

This study is arranged into five chapters. The first is the introduction which consists of a short introduction to the study, statement of the problem, purpose of the study, definition of terms as used in this particular study, the significance of the study, assumptions, limitations and the organization of the study.

Chapter two is the review of literature. This chapter contains a short introduction and summary. It also contains the theoretical basis for the four factors of stress and the history of the studies of stress and health issues related to stress. The research questions addressed in the study are included in this chapter.

Chapter three is methodology including a short introduction, a description of study participants, the instruments used to collect data, the research design and procedures. This chapter defined the participants of the study and explained how the study was carried out. It also defined the variables used in the study.

Chapter four is the analysis of data which explains the statistical techniques used and how they are appropriate for this study.

Chapter five is the conclusion which will provide a final summary of the study, its implications and recommendations for further studies.

CHAPTER II

REVIEW OF LITERATURE

Introduction

This chapter examined the historical background of stress, how it was initially defined and how it has evolved over time. The review of current literature included the theories of stress including what causes stress, how it is manifested in individuals and who is most susceptible to the negative effects of stress. The literature review focused on research on mental health and physical health issues associated with acute or prolonged job stress. The studies that focus on the relationship of job stress related to mental health and physical health provided a basis for understanding the possible correlation between job stress and one's health. Existing theories served to provide the basis for this study that looked at the possible correlations between the four stress factors, role based, task based, boundary spanning and conflict mediating stress in relationship to one's reported mental health and physical health.

Historical background of stress

The use of the term stress was developed by and attributed to Hans Selye (1956). He was an internist who discovered stress by accident while researching the effects of hormones on the body (Rice 2000). Selye defined what is now called stress as a

“syndrome produced by various noxious agents,” which he called the General Adaptation Syndrome or GAS (Selye, 1974, pp. 25-26). He linked stress to the “fight or flight” response that is cited frequently in science classes today (Selye, 1974, p. 14). During this response to a stressful situation, the body goes through physical changes that can cause physical and mental discomfort as well as illness, if unchecked or prolonged. This discomfort results as the body’s parasympathetic nervous system changes and prepares to take action: either fight or flight. In society today, one or both of those responses may be a socially inappropriate response, but the body still prepares itself to handle the stimulus in the fight or flight manner. The body’s manner of dealing with the stressor must be delayed until an appropriate method of expression can be utilized. It is the delayed response to the stressor, the inability to handle the stress that often causes the physical and emotional symptoms (Botts, 1986; Ivancevich & Matteson 1980).

A more current definition and explanation of stress was presented by Allison (1997) who believed stress is an interaction that occurs when demands of the situation are greater than an individual can handle. High stress levels occur when this situation continues for a prolonged period of time, and the individual does not have any control over the situation and cannot arrive at a solution (Berkly, 2002; Torrelli & Gmelch, 1993).

Gmelch (1996) spent his career studying stress and focused on the effects of stress on people in many occupations. He defined stress as the anticipation an individual experiences if one doubts their ability to respond appropriately to a demand and the fear of negative consequences for an inappropriate response to that demand.

McEwen (2002) believes that stress is “nature’s way of empowering us with the ability to respond swiftly to sudden events while remaining mentally alert and physically prepared to meet a challenge” (p.1). Although stress can be perceived as positive in some situations, stress becomes negative if prolonged and too much of a challenge to one’s abilities or to one’s response system. It is at this point that stress has adverse effects on one’s health, if the body is continually exposed to high pressure or stress levels. The adverse effects to one’s health can be manifested in mental health issues or physical health issues.

Theories of stress

Ursin (2004) focused on the stages of stress. He argued that stress is subjective because the stimulus that produces stress is evaluated by each individual based on past experience, expectation of the stimulus and past outcomes in one’s responses to stressful situations. Stress is also situational. Some stimuli are threatening in all situations, other stimuli are positive in all situations. Some stimuli may be interrupted as positive or negative depending on the situation at the time they are presented. The opportunity of interpretation of stimuli as it relates to stress is important to understand since phasic (arousal that occurs in phases) arousal is stress that produces a learning experience and positive outcome, while sustained arousal is long term negative stress that leads to disease. Ursin (2004) believed that job stress was sustained arousal and could therefore lead to disease.

Cognitive theorists suggest that stress comes from within the individual, not, external forces. Cognitive theorists believe that it is one’s response to those outside factors that accounts for stress (Moreno, 2003; Rodriguez et al., 2001). The cognitive

theory explains that individuals go through four steps when confronted with a potential stressor. The first step is the individual must evaluate the situation; second they must evaluate their ability to handle the situation; third, they evaluate options available for coping with the stressor; and last, they must take action. For many individuals, the level of stress heightens during the steps that require an evaluation of one's personal ability to deal with the potential stressor and the options available to handle the situation. Individuals either over- or under- estimate how well they can manage the situations or how effectively they can select the appropriate options to solve the problem. This process becomes more intense the more unfamiliar the potential stressor is to the person experiencing the stressor (Duvall, 2001).

The demand-control-social support theory suggests that negative stress occurs when the job places high demand on the individual, but provides low control and low support. If the individual does not or cannot control these variables, stress increases resulting in emotional exhaustion (Gmelch, 1996).

Gmelch, (1996), stated that one's mental health or physical health can be affected by this emotional exhaustion. He discovered that school administrators suffer from emotional exhaustion, which often resulted in decreased job satisfaction and job performance. The term burnout has been used in more recent studies to describe emotional exhaustion. Both refer to a decline in productivity, physical and emotional exhaustion and social impairments such as isolation at work. Burnout usually results in negative feelings, frustration, irritability or moodiness (Kowalski, 2006). According to Peterson (1993) many researchers support this theory (Berkly, 2002; Blumberg

&Blumberg, 1985; Domenech, 1996; Ferrandino, 2001; Hertling, 2002; Howley et al., 2001; Pierce, 2000; Whitaker, 1996).

The cognitive activation theory of stress or CATS is a stress theory that explains stress as a psychobiological condition that relates stress to possible health consequences (Ursin, 2004). According to CATS, if there is a discrepancy between what is, and what should be, stress responses are triggered. In general, stress, appropriate and timely responses are necessary to the proper functioning of an individual; it allows people to learn and survive. However, if the responses are sustained, illness is likely to occur. Sustained arousal causes changes in the brain. Uncontrolled stress biases the brain toward depression that can be either biochemical or cognitive in origin. Sustained or tonic arousal can also lead to high levels of norepinephrine, cortisol and thyroxin. Over an extended period of time individuals may develop gastric ulcers, immune deficiencies, hypertension, cardiac failure and depression. Cognitive activation theory (CATS) stated that sustained arousal leads to two things; one is helplessness that causes depression and the other is hopelessness. The hopelessness can lead to poor lifestyle choices such as smoking, lack of exercise, poor diet and other risky behaviors that can also cause poor physical health (Baum, 1999; Ursin, 2004). Other studies referred to these as social changes, and added another social change: little or no exercise, which can lead to weight gain. In addition these social changes can cause one to seek or maintain proper care for an existing disease (Green & Shellenberger, 1990; Kowoloski, 2006).

Gmelch (1996) defined four stages of stress: In the first stage, an event occurs that affects the individual. The second stage is the interpretation of the stimulus. The third stage is the response to stimulus based on the interpretation in stage two; this

includes deciding if the individual will cope with the stressor, or if he/she will succumb to its effects. The fourth stage is the consequence that occurs when a person succumbs to the stressor; the longer the distress remains the greater the consequence to the individual.

This theory breaks down the stressors into the four factors: boundary-spanning, task-based, conflict-mediating, and role-based (Torelli & Gmelch, 1994). These factors are attributed to outside forces and interaction with one's environment (Rogers, 1976). The four stress factors are used in this study to determine the relationship of the stress factors to the mental health and physical health specific to superintendents.

Health Issues Related to Stress

Health researchers focused on stress as it related to illness. Research has shown that there are biological changes that accompany or are induced by stress. These can include sympathetic arousal and its contribution to hematological changes that can cause heart disease (Baum & Posluszny, 1999). The biological link to stress has also been connected to poor wound healing and depressed immune systems that make individuals prone to illness and viral infections as well as some types of cancers and HIV (Baum & Posluszny, 1999). Based on these studies, there appears to be co-morbidity of physical health problems and mental health problems (Anderson, 1994, Cohen, 1996 as cited by Baum & Posluszny, 1999). Kristensen (1996) noted that prolonged job stress accounts for increased incidences of heart disease, diabetes, cancer, musculoskeletal diseases and multiple other health issues. These physical diseases are seen at a higher incidence among professionals that function under high levels of job stresses than in the general populations (Peterson, 2003). Peterson (2003) also notes that absenteeism and decreased productivity occur in the presence of job stress. It could be assumed that diminished

physical health or mental health could contribute to those issues. An estimated 70%- 80% of all visits to internists and family physicians are due to stress related illness (Rice, 2000). In 1980, 230 million prescriptions were prescribed to relieve the symptoms of stress (Marshall, 1980, p 8). It would be reasonable to assume that number has increased since that time.

Physical symptoms of stress and diseases caused by stress can have negative effects on an individual's mental health. These symptoms range from mild to severe. Milder symptoms such as feelings of disgust, anxiety, and decreased job performance may occur (Marshall, 1980). More severe mental conditions can also result from prolonged stress such as depression, memory loss, irritability, social withdrawal, anxiety, or an underlying sense of persistent anger and in extreme cases, thoughts of suicide. In an effort to handle these conditions, social symptoms may occur such as heavy drinking, smoking or the use of drugs (Jones, 2001; Wainwright, 2002).

Emotions can affect the level of stress felt by an individual because stressors require an adaptive response that often elicits a negative emotional reaction such as anger, frustration, anxiety and tension. These emotional responses are used by the individual as coping mechanisms; however use of these coping mechanisms may keep an individual from directly dealing with the stressor. This procrastination can cause long term stress that may result in responses such as physical health problems or mental health problems (Spector, 1999).

Some stressors require an immediate reaction such as a job loss, but others occur gradually over time and have a cumulative effect, such as an increased workload. These cumulative stressors lead to increased emotional issues and physical pressure, irritability,

anger, anxiety and physical fatigue and strain. This long term strain can cause physical disease such as diabetes or heart problems. The short term effects are illness such as high blood pressure and emotional reactions (Spector, 1999).

When an individual makes an effort to control stress, it may seem to be a positive response; it can however become a contributor to increased stress levels. The effort to solve one's problems can lead to a physiological release of increased adrenaline, noradrenaline and cortisol. All three are stress hormones. The release of these hormones occurs because the action that is required to control the stressor may in turn result in increased responsibilities, which results increased stress on the individual, so it becomes a counterproductive effort (Kristensen, 1996).

Causes of stress among superintendents

Job stress occurs when the situation appears to be greater than the individual's belief in their ability to deal with it (Allison, 1997). It is this inability to deal effectively with a situation or find a solution to the problem that results in negative or high stress (Berkley, 2002). Job stress may be a more significant factor for people who tie their self worth to their job or job performance. These workers react to job stress more often and at a heightened state than those who tie their self worth to things other than their jobs (Hobson, 2001).

Some studies listed multiple causes of stress among superintendents such as school board relationships, budgets, politics, financial issues, personnel issues, community relationships, and accountability requirements, excessive workloads, lack of control over variables that affect the job, and long hours (Crane, 2006; Criswell, 2007;

Glass, 2007; Gmelch, 1996; Hobson, 2001; Koch et al., 1982; Peterson, 1993; Welch, 2004).

In the mid-decade report, Glass (2007) cites that over the last 10 years the amount of stress reported by superintendents has increased. In 2007 06%, up from 52% of superintendents surveyed reported considerable or very great stress. Some districts are notably more stressful due to intra-board conflict or dysfunctional communities, but there are many potential stressors in all districts (Glass, 2007).

Tortelli and Gmelch's (1994) research indicates that job stress has many sources that make up four basic factors. One factor is role-based stress. Role-based stress can be a result of ambiguity or conflict about how the superintendent is to function in their job. For example, are they to be the CEO of the school or are they a change agent who reorganizes the district to bring about improvements. Task-based stress occurs when the job to be performed is greater than the individual's ability to complete it, or when there are too many job requirements to be completed and not enough time to adequately complete them. The third type is boundary spanning stress. This stress is related to external conditions such as conflicts with the community, school board or parents. The superintendent may not want to participate in all of the community events as part of their job, while the community expects them to be a part of all community activities. The last source defined is conflict mediating stress that is caused by conflicts that occur within the school district itself. These conflicts might involve staff or students. This type of stress may be very common in district that has an organized negotiation unit of teachers and staff.

Task based stress, as measured by the Administrator Stress Index, can result from many sources. Superintendents must be financial managers, instructional leaders, negotiators, personnel managers, mediators, in many small districts transportation directors, maintenance supervisors and perform various other jobs (Passalacqua, 2007). Superintendents are also political leaders. The job of balancing the needs and wants of the school board, in addition to the staff, and community, while trying to do what is best for student achievement, can be stressful (Passalacqua, 2007). Political issues have increased over the last several years with the increase in exposure from newspapers, television and most recently the internet (Passalacqua, 2007; Sharp and Walter, 1997). Kowalski (1995) reported that 77% of surveyed superintendents stated that political activity in their job would be described as “definitely hardball and the remainder said it was somewhat that way” (p. 57.). Eighty one percent of superintendents leave the job due to political issues (Farkas, Johnson, Duffett, & Folenal, 2001).

Role-based stress can result from confusion about what is expected from the superintendent on the job. Tortelli and Gmelch (1994) stated in their study that if an administrator does not understand his/her role and responsibilities this lack of understanding is a source of stress. A superintendent should also expect differences to occur regarding the expectations of the job; these differences will also increase stress. In other words, superintendents must understand what the position entails. Conflict occurs when there is confusion about the role of the superintendent in the district. The school board may assume that the superintendent will function as a change agent, while the superintendent is thinking he/she should be focusing on the finances of the district and function as a CEO. Confusion occurs and the board/superintendent relationship becomes

strained. Role conflict can also occur if the superintendent is hired as a change agent that results in staff turnover. The board may not understand that turnover is a result of the change they requested. The board may decide that they did not really want change (Sansouci, 2007). There is a role conflict that was unexpected. The superintendent/board relationship is strained.

The superintendent/board relationship is the most important factor for the success of a superintendent because it is the board that hires and fires the superintendent (Fusarelli et.al. 2003; Passalacqua, 2007). In addition, if there is role conflict between the school board and superintendent, it leads to distrust and unrest within the staff and community (Glass, 2007). Stress can occur due to lack of communication between the board and superintendent. It should be a two way personal communication that develops trust and a relationship. If either party is unable or unwilling to communicate effectively, job stress is increased (Passalacqua, 2007, Welch, 2004). Role conflict occurs when an individual is required to violate his/her value system to please others (Peterson, 1993).

It is also important that board members define and understand their role in relationship to the superintendent. Boards are instructed to be policy makers and focus on student achievement. Some boards are more focused on budgeting and administration of the daily operations of the school. This confusion and intertwining of roles create stress for the superintendent who is trying to implement the policies. Many boards tend to micromanage the school operations. The more power the school board exerts, the more stressful the relationship between the board and the superintendent may become (Welch, 2004).

Boundary-spanning stress is related to issues such as the federal government's No Child Left Behind (NCLB) program. It is the most recent and arguably the greatest stressor for superintendents (Glass, 2007). It requires highly qualified teachers, performance standards, mandates, testing and Annual Yearly Progress as well as producing an Annual Performance Index that is able to compete with other public schools. If these mandates are not satisfactorily met, penalties range from loss of funding, to government restructuring of the school (U.S. Department of Education, 2003). Many superintendents are critics of NCLB and believe the requirements are unrealistic and are subject to questions of costs, adequacy of resources for all schools and strength of commitment on the part of the students and parents (Welch 2004). Compliance with NCLB has caused superintendents to refigure budgets, eliminate teachers and programs, and change existing programs thus creating poor working environments for staff. This "big brother" involvement is very different from the local control experienced by school districts until recent years (Glass 2007, p. xvii).

Conflict-mediating stress can occur from the political conflicts that arise in trying to satisfy the needs and wants of the staff, the school board and the community. Many superintendents are active in the role of negotiation of contracts with staff (Criswell, 2007). They must meet the needs of staff while maintaining financial stability for the district. Gmelch (1996) contended stress was caused by conflicts that occur within the school district itself is an example of conflicting-mediating stress. Many superintendents were uneasy with the role of negotiator in the district (Kowalski, 1995). Mediation can be a source of stress for many superintendents because of its political implications.

Superintendents cannot be successful without the support and cooperation of their staff; this makes negotiations more political and stressful (Criswell, 2007).

Conflict mediating stress is one of the four stress factors that provided the basis for the Administrative Stress Index which was based on self reported causes of stress. These causes were used to develop the stress survey for administrators (Koch, et al, 1996). This study used the four factors of stress to evaluate the effect on the mental health and physical health of superintendents.

Stress is a part of every job. However, being a public school superintendent may be more stressful than other professional leadership positions. Glass (2007) reported that 60% of superintendents surveyed in 2007 reported considerable or very great stress. Some of the causes of stress are high stakes federal mandates, poor funding for schools, hostile media and community relationships, insufficient time to do the job effectively, and an expansive job description. There are many negative effects of stress on an individual's physical and mental health. Excessive levels of stress can impair decision-making, decrease the ability to cope and adversely affect the ability to manage conflict (Kowalski, 2006).

There have been many stress studies, including its effects, its prevention and management. Some stress is not considered negative (Gmelch, 1996), but this study focused on the negative effects of stress that occur when situations go beyond simply being a challenge. That is, this study explored stress that causes mental, physical or emotional distress, specifically and especially prolonged stress resulting from being in a position of public leadership. The consequences may include disease, burnout, and lack of productivity or serious health issues (Gmelch, 1996).

Summary

The purpose of this quantitative study is to explore the relationship of the four stress factors, boundary-spanning stress, conflict-mediating stress, role-based stress and task-based stress to the mental health and physical health of public school superintendents. Studies report that poor health decreases productivity and results in turnover. In addition, good mental and physical health is necessary to meet the demands of the job (Peterson, 1993; Rice, 2000). Investigating the health costs paid by superintendents contributed to the literature in the area of physical health and mental health as it relates to stress. Findings may be used to help superintendents develop an awareness of the sources of stress and learn what they can do to prevent the negative effects of stress. This may improve his/her performance and tenure thus preventing a shortage of qualified superintendents.

CHAPTER III

METHODOLOGY

Introduction

The purpose of this quantitative study is to explore the relationship of the four stress factors, boundary-spanning stress, conflict-mediating stress, role-based stress and task-based stress to the mental health and physical health of public school superintendents. This study used the four stress factors: as the indicators of the sources of stress and used the self reported health status of public school superintendents, based on the SF36-v2 health survey, to determine the correlation between the stress factors and physical and mental health. The following research questions guided the study:

1. Is there a relationship among the four stress factors and the mental health of a public school superintendent?
2. Is there a relationship among the four stress factors and the physical health of a public school superintendent?
3. Do the four stress factors impact or predict the mental health of a public school superintendent?
4. Do the four stress factors impact or predict the physical health of a public school superintendent?
5. Which of the four stress factors is a stronger predictor of the mental health of a public school superintendent?

6. Which of the four stress factors is a stronger predictor of the physical health of a public school superintendent?

Participants and Subjects

Data were collected using an online survey that was distributed to Oklahoma superintendents through the Cooperative Council of School Administrators Association. Participants included superintendents who were employed in K-12 and K-8 districts in Oklahoma. The survey was distributed using Front Page, a program that allows for contact between participants and researcher, without disclosure of the respondent's identity. A letter of explanation regarding the use of the data, and the assurance of participant anonymity was included with the survey. Participants were given information to access the data after the study was completed. The response rate was 32% of surveyed superintendents for N=171. This is a relatively low return rate, but adequate to complete the study with the chosen research design.

Demographic information was obtained from each participant. The results of the demographic information can be seen in Table 1. The table notes age, location of school, size of district, years of experience, level of education, and types of administrative positions performed as well as the category of district in which the participants worked.

The Administrative Stress Survey was developed in 1982 and the ethnicity and gender were not part of the survey questions. Due to oversight on the part of the researcher, they were not added when the survey was constructed for use in this study. Those items should have been added to make the data more applicable to current societal standards. The omission of those categories must be noted as a limitation in this study since the data would have provided additional information for consideration and analysis.

Table 1

Demographics	N (%)
Age	136 (79.5)
<30	0(0)
30-39	11(8.1)
40-49	79(46.2)
^a 50-59**	35(20.5)
60 +	45(33.8)
Admin. category	171(100)
Supt w/ bldg principal	139(81.3)
Sole administrator	13(7.6)
Supt w/ elem. Principal	13(7.6)
Supt w/ second. Principal	6(3.5)
Degree	171(100)
Masters	123(71.9)
Ed Specialist	29(17.0)
Ed.D/Ph.D	19(100)
0-499	64(37.4)
500-799	38(22.2)
800-1499	26(15.2)
>1500	43(25.1)
Location of district	171(100)
NE	53(31.2)
NW	24(14.1)
SE	36(66.5)
SW	25(14.7)
Central	32(18.7)
Type of district	171(100)
Rural	140(81.9)
Urban	8(4.7)
Suburban	22(12.9)
Experience	171(100)
1-2 years	31(18.1)
3-5 years	34(19.9)
6-10 years	54(31.6)
11-15 years	21(12.3)
16-20 years	13(7.6)
>20 years	15(8.8)
Size of district	171(100)
0-499	64(37.4)
500-799	38(22.2)
800-1499	26(15.2)
>1500	43(25.1)

^a The age bracket of 50-59 on the questionnaire was omitted in error. The number used on this table should be taken as an estimate. It was obtained by using feedback from participants who contacted the researcher to confirm their age in that category.

Instruments

Superintendents were sent two questionnaires consolidated in one email. One part was the Administrative Stress Index (ASI) the second part of the survey was the SFv2-36 health questionnaire (See Appendix A).

The Administrative Stress Index is a 5 point Likert scale instrument that consists of 35 questions designed to measure stress as a multidimensional factor specific to school administrators. The responses to each question was categorized into one of the four stress factors which contributed to the overall stress experienced by superintendents as shown in Table 2.

These factors were consistent with theoretical models of occupational stress (Koch et al., 1982). Questions that failed to obtain a .30 on any factor was dropped; however, they are included in the ASI as administered for this study (Koch et al., 1982). This information explains the discrepancy in the number of questions on the questionnaire and the number of questions that make up the stress factors. In addition, the Administrative Stress Index contained a portion that reflected the intensity factor for each item on the index. The intensity items were disregarded for the purpose of this study.

Table 2

Questions that make-up four stress factors

Factor 1 Role-based	Factor 2 Task-based	Factor 3 Boundary-spanning	Factor 4 Conflict-mediating
Question 3	Question 1	Question 24	Question 7
Question 4	Question 2	Question 27	Question 20
Question 13	Question 9	Question 29	Question 23
Question 16	Question 10	Question 35	
Question 22	Question 12		
Question 30	Question 18		
Question 34	Question 19		
	Question 26		
	Question 31		
	Question 32		

The Administrative Stress Index clusters around four factors. Factor 1 accounted for 50 percent of the common variance that is similar to the Job Related Stress Index (Indik et al., as cited by Koch et al., 1982). Six of the seven Likert items were taken from that index. Items pertained to the administrator's role-set interactions, attitudes and his/her role in the organization. This factor represented role based stress.

Factor 2 accounted for 22 percent of the common variance and pertained to the day-to-day administrative tasks within the district. This was based on task activities such as communication and coordination, not social-interpersonal stress. This represented task based stress. Eight of the ten items in this part of the design emerged from the subject

participation in pilot phases of the instrument design (stress log) and relevant literature (Koch et al., 1982).

Factor 3 accounted for 16 percent of the variance and represented boundary spanning stress. These items were related to administrator's duties such as collective bargaining, dealing with governing agencies and school budgets (Koch et al., 1982).

Factor 4 accounted for 12 percent of the variance; represented conflict-mediating stress that factor was exclusive to the public school setting. That would include parent/student school conflicts. These items were developed in the pilot phase of the design (Koch et al., 1982).

Coefficient alphas of each dimension were calculated to be .70 or higher in each dimension of stress; this is positively skewed and not "true reliability". The amount of shared factor variance was less than 1%, the median correlation was two and one-half times the inter factor correlations (Koch et al, 1982, p.425).

The SF-36 is a generic measure of the general physical health and mental health of the participant. It is a fee for use assessment. The necessary fees were paid to use the survey and permission was obtained prior to use as required by Quality Metric, the company that markets the assessment. Reliability for the both mental and physical scores exceeds 0.90 (Ware, 2000). The standard error of measurement is a 95% confidence level when giving an individual assessment. There is less error of measurement when giving group assessments such as the one given in this study. One can have greater than the 95% confidence level that is documented for individual assessments when interpreting group mean scores. (Note: a specific percentage was not given for group

assessment.(Ware, 2000). Studies have yielded content, concurrent, construct, predictive and criterion evidence of validity (Ware, 2000).

The physical component summary (PCS) indicates physical functioning, and role participation based on physical problems, the amount of bodily pain, and ones general overall health. A low score in this area indicates increased bodily pain, poor role functioning caused by physical health problems and a poor general overall health. A high score indicates few if any limitations or physical disabilities and high energy levels and good sense of well being.

The mental component summary (MCS) indicates the mental functioning and social role activities based on mental health. A low score indicates limitations in these domains such as psychological distress, complaints of emotional problems and diminished social and role functions. A high score in this area indicate a sense of good overall health, no effect of role and social functions and few complaints of emotional problems.

A mean score of 50 is used to determine norm for both the physical health and mental health components. When scoring group results a standard deviation of 0.3 is used that means that 3 points variance from the mean of 50 is considered to be functioning within normal limits in the physical and mental domains. This is more stringent than the 0.5 deviation used for individual scores reflecting the greater confidence level of group scores.

Research Design and Procedure

This study applied a quantitative design to investigate the correlation and relationship of the mental health and physical health in relationship to the four stress

factors developed by (Koch et al., 1982). A correlation and linear regression were done to determine if a relationship exists between the variables indicating it was appropriate to answer the research questions of the study. Statistically, a correlation and linear regression are used to measure the strength and direction of a relationship between variables. Creswell (2005) noted that in a research study using an explanatory design, a regression analysis is appropriate to measure multiple independent variables. Both Pearson correlations and regressions are appropriate for measuring the relationship between mental or physical health and the indentified stress factors. The dependent variables were physical health and mental health. The independent variables were the four stress factors.

The data were collected by sending an email that contained two questionnaires: Administrative Stress Index and the SF36-v2. Statistical Package for Social Science version 14.0 was used to compile the questions that made up the four stress factors as shown in Table 2. SPSS was also used to analyze the raw data once the stress factors had been compiled. The SF36-v2 responses were scored with the software designed to obtain scores based on the raw data (Ware, 2000). Demographics were collected by questionnaire form in the same email as the surveys. SPSS was also used to analyze the demographic data in relationship to the four stress factors..

Procedure

The subjects were selected and permission was obtained from the director of Cooperative Council of Secondary School Administrators (CCOSA) to send the survey via email using the CCOSA data base. Data were collected and secured by the Oklahoma State University technology center and sent to the researcher when all participants had

responded. Upon receipt of data the researcher addressed the data according to the procedures in this study.

The Administrative Stress Index was deemed to be reliable since it had been field tested and used in several studies previously. (Criswell, 2007; Botts, 1986; Koch et al., 1984). The data obtained from this questionnaire was analyzed using SPSS.

The SF36-v2 has been used extensively by multiple organizations since 1992 when it was developed by researchers for the Kaiser Foundation (Ware, 2000). Accuracy is based on self-reporting of data by each participant, and there were no confounding variables to control for in this study.

Summary

This quantitative study was to explore the relationship between four defined stress factors and the mental health and physical health of public school superintendents. The population was defined and questionnaires were used to collect data using an online survey distributed by email. The data were obtained from the email survey which contained the SFv2-36 and the Administrative Stress Index, as well as demographic information. The raw data were analyzed using SPSS and details of the analysis were provided in the study. Analysis included correlations and linear regression of the data which are appropriate types of analysis for this study. Results are reported in Chapter IV of this study.

CHAPTER IV

ANALYSIS OF DATA

Introduction

This chapter presents the descriptive statistics that provide the basis for the results of the research questions proposed in this study. The data presented for each research question was analyzed and presented in narrative format. The results of the statistical analysis specific to each research question are also included in this chapter. Charts and tables are provided for clarification and visual support. A summary of findings is reported at the end of the chapter.

Descriptive Statistics

Physical health scores were calculated for each participant by using the scoring program specific to the SFv2-36 questionnaire. The scoring software produced a single score that reflected overall physical health of each participant. These norm based scores have a norm value of 50 and a standard deviation of 10. Scores of 40-60 reflect average physical health. Scores below 40 indicate poor health and the lower the score the poorer the health. Scores above 60 indicate excellent health; the higher the scores, the better the overall physical health of the participant (Ware, 2000).

Mental health scores were calculated for each participant by using the scoring program specific to the SFv2-36 questionnaire. The scoring software produced a single score that reflected overall physical health of each participant. These scored are norm based scores as well and follow the same numerical indicators as physical health scores.

These norm based scores have a norm of 50 and a SD of 10. Scores of 40-60 reflect average health. Scores below 40 indicate poor mental health and the lower the score the poorer the mental health. Scores above 60 indicate excellent health; the higher the scores, the better the overall mental health of the participant (Ware, 2000).

Quality Metric suggests that researchers note the percentage of participants who are functioning within the “normal” range. This will assist in evaluating the overall health of the participants in the areas of both mental health and physical health (Ware 2000, p. 74). Those results are reported in Table 3. When the scores are divided to ascertain poor, average and above average mental health and physical health, the standard deviation of 10 is taken into account. Scores below 40 are listed as poor mental health or physical health. Scores that fall into the 40-60 range are listed as average mental and physical health. Scores above 60 are listed as excellent mental health and physical health. Approximately 30 percent of the participants fell into the poor range for physical health; the remainder of participants scored in the average or above range. However, in the mental health category nearly half of the participants recorded scores in the poor range. This is a significant number of superintendents who report experiencing poor mental health.

Table 3

Percentage of health score distribution

	Physical health score	Mental health score
Poor health	29.8%	45.6%
Average health	28.0%	22.2%
Excellent health	42.1%	32.1%

Percentage does not = 100% due to rounding of decimals.

Stress levels of each participant were reported on a 5 point Likert scale ranging from “rarely” causes stress (one on the Likert scale) to “very frequently” cause stress (five on the Lickert scale). Individual questions were categorized into the four stress factors: Role conflict, boundary spanning, task based, and conflict mediating as shown in Table 2. It was those four stress factors that were used to analyze the correlation between mental health and physical health to answer the research questions. The lowest average stress Likert score recorded was 1.67 that was on the conflict mediating stress factor. The highest average stress factor score recorded was on also noted on the conflict mediating stress it was 4.33.

Research Question One

Is there a relationship among the four stress factors and the mental health of a public school superintendent? Correlation coefficients were used to determine a statistically significant correlation in order to establish a relationship between mental health and the four stress factors. The dependent variable was mental health and the four stress factors were independent variables. All four stress factors had significant correlations. Pearson correlations ranged from $r = -.430$ to $r = -.809$ (see Table 4). A coefficient of .00 indicates no relationship while the closer to +1.0 or -1.0 the more significant the relationship. A positive sign indicates a positive relationship indicating high scores on both variables. Negative correlations indicate that high scores on one variable will result in low scores on the other variable. These correlations were significant indicating a significant linear relationship at alpha of 0.05 between all four stress factors and mental health. Conflicting mediating stress indicated the most significant relationship of the four stress factors.

Table 4

Pearson correlation:

Stress factors	Mental health
Conflict mediating	* -.809
Boundary spanning	*.514
Task based	*.578
Role based	*.430

* significant at alpha = .05

Research Question Two

Is there a relationship among the four stress factors and the physical health of a public school superintendent? Correlation coefficients were used to establish a statistically significant correlation in order to establish a relationship between physical health and the four stress factors. Physical health was the dependent variable; the four stress factors were the independent variables. All four stress factors had a correlation that ranged from $r = .120$ to $r = -.366$ (see Table 5). A coefficient of .00 indicates no relationship while the closer to +1.0 or -1.0 the more significant the relationship. A positive sign indicates a positive relationship indicating high scores on both variables. Negative correlations indicate that high scores on will variable will result in low scores on the other variable. Three of the stress factors, task based, boundary spanning and conflict mediating, indicate a moderately significant relationship between those factors and physical health. The role based stress factor indicated only a slightly significant relationship to physical health.

Table 5

Pearson correlation/physical health

Stress factors	Physical health
Conflict mediating	*-.366
Boundary spanning	*.261
Task based	*.278
Role based	*.120

* significant at alpha = .05

Research Question Three

Do the four stress factors impact or predict the mental health of a public school superintendent? All four stress factors resulted in statistically significant correlations leading the researcher to investigate further by using of a linear regression analysis to determine the strength and direction of the relationship. The linear regression analyses indicated the combination of the four stress factors resulted in the explanation of 79.1% of mental health issues. The dependent variable was mental health and four indentified stress factors were the independent variable. Relationships above 15% are considered to be significant. This indicates that the combination of the four stress factors did have a significant impact for predication of the mental health of superintendents. The significant correlation was seen in conflicting mediating stress had a t score of -11.849. This negative correlation indicated that as the conflict based stress rose for a superintendent, the mental health scores of that superintendent declined. The conflict mediating stress factor was the greatest predictor of the mental health of a superintendent. (see Table 6).

Task based stress had a t score of 5.887 which indicates a positive correlation. As the task based stress increases, the mental health of the superintendent also increases. An assumption could be made that the negative correlation of conflict mediating stress was seen because conflict mediating stress occurs as an unpredictable stress that one cannot

be as prepared to handle. Task based stress is the stress of knowing how to do a job. It may be a job that is not pleasant or in the usual job description of a superintendent, but it is a job that can be accomplished with predictability.

Role based stress resulted in a negative correlation leading to an inverse relationship to ones mental health. The increase in role based stress results in a decrease in ones mental health. The predictability of role based stress is considerably less than conflict mediating stress but is statistically significant. Boundary spanning stress had the least predictive value of mental health. It resulted in a positive relationship indicating that as boundary spanning stress increases the mental health of the individual also increases.

Table 6

Predictor of mental stress

Stress Factor	t scores
Conflict mediating	*-11.84
Boundary spanning	*3.862%
Task based	*5.887%
Role based	*-4.767%

* significant at alpha = .05

Research Question Four

Do the four stress factors impact or predict the physical health of a public school superintendent? All four stress factors resulted in statistically significant correlations leading the researcher to investigate further by using of a linear regression analysis to determine the strength and direction of the relationship. The linear regression analyses

indicated the relationship between physical health and all four stress factors to be significant. Relations above 15% are considered to be significant. The combination of the four stress factors explained 21.6% of physical health issues for superintendents. Conflict mediating stress was the highest predictor with a t score of -4.192. Negative correlations indicate an inverse relationship, as the conflict mediating stress increases the physical health decreases. (see Table 7) Role based stress indicated a positive correlation as did the other two factors of task based and boundary spanning based stress. The predictive value of the four stress factors were not a strong for physical health as for mental health.

Table 7

Predictor of physical stress

Stress Factor	t score
Conflict mediating	-4.192
Boundary spanning	1.102
Role based	3.405
Task based	.966

* significant at alpha = .05

Research Question Five

Which of the four stress factors is a stronger predictor of the mental health of a public school superintendent? Correlation of the four stress factors and the mental health scores indicate that conflict mediating stress has the strongest correlation of all the stress factors at $r = -.809$. This is a very significant correlation to mental health. The predictor

of conflict mediating stress resulted in a t score of -11.849 meaning that conflict mediating stress is a strong indicator or predictor of mental health issues of a superintendent's stress. Based on the correlation and resulting relationship, in addition to the linear regression, the stress factor of conflict mediating stress would be a significant indicator of one's mental health in the job of public school superintendent. Conflict mediating stress originates from political conflicts that arise related to staff, the school board or the community, meaning it can come from within the school or outside the school itself (Criswell, 2007; Gmelch, 1996) The stress factor of conflict mediating stress accounts for approximately 12% of the items on the Administrative Stress Index. (Koch et. al., 1982).

Research Question Six

Which of the four stress factors is a stronger predictor of the physical health of a public school superintendent? Correlation of the four stress factors and the physical health scores indicate that conflict mediating stress has the strongest correlation of all the stress factors at $r = -.366$. This is a significant correlation to physical health. Correlation of the four stress factors and the physical health scores indicate that conflict mediating stress has the strongest correlation of all the stress factors. The predictor of conflict mediating stress resulted in a t score of -4.192 indicating that conflict mediating stress is a significant predictor or indicator of the physical health of a superintendent. Conflict mediating stress would be the strongest predictor of one's physical health in the job of public school superintendent.

Demographics

The average participant was 40-49 years of age with 6-10 years of experience. held a master's degree and was employed in a school that had an enrollment of less than 500 students. Almost 82% were from rural schools and had at least two building principals sharing the administrative duties of the district. More participants responded from northeastern Oklahoma than any other area of the state.

SPSS was used to run a Pearson Correlation to determine if there was a significant relationship between the stress factors and any of the demographic categories as shown in Table 1. No significant relationship was noted in the administrative category related to whether a superintendent shared the administrative duties with principals. Correlations that exceed $R^2 = .15$ were considered to be significant. Correlations of significance were noted between age and all four stress factors. The conflict mediating stress factor had the most significant relationship. This stress factor was significant in other areas of the study as well especially related to mental health. Statistically significant relationships were noted with all four stress factors and the age of the participant. The most significant relationship was noted with conflict mediating stress ($r = -.305$). Role based stress was significant also ($r = -.263$) followed by task based stress ($r = .257$) and the least significant was boundary spanning stress ($r = .187$).

The only other demographic factor that indicated a significant relationship with any of the four stress factors was conflicting mediating and the degree held by the superintendent ($r = -.160$). No statistically significant correlations were noted in any other area of demographics.

As noted in the limitations section, gender and ethnicity were omitted from the questionnaire as an oversight. It would be beneficial with increasing numbers of females and ethnic minorities securing the job of superintendent to use that omission as a basis for further study.

Demographic relationship to stress factors

Stress Factor	Age	Number of Principals	Degree Held	Size of district	Location of district
Role Based	*-.263	.070	.014	.041	.051
Task Based	*.257	-.066	.122	.095	.019
Boundary Spanning	*.187	.096	.116	.054	.052
Conflict Mediating	*-.305	.087	*-.160	.076	-.150

* significant at alpha = .05

Summary

The analysis of the data in this chapter provided information about the stress factors that cause the greatest impact on the mental health and physical health of a superintendent. This data can help superintendents address the stress that is part of their job and handle it in a manner that may prolong their career. The participant's demographic information and the data relevant to the research questions will provide direction and recommendations for current superintendents. Chapter V of this study discusses conclusions and recommendation for further study.

CHAPTER V

CONCLUSION

Introduction

The purpose of this quantitative study was to explore the relationship of the four stress factors, boundary-spanning stress, conflict-mediating stress, role-based stress and task-based stress to the mental health and physical health of public school superintendents. This chapter will also look at the implications for the study, areas the results can be put into practice and recommendations for future studies. This chapter will relate the findings to the theoretical knowledge on the topic of stress and its effect on mental and physical health. The findings for each research question are addressed and the implications for those findings discussed. Each question breaks the findings into two areas: the effects on mental health and the effects on physical health. In addition, this study looks at the relationship of the four stress factors, the strength of relationship, which factors have the most effect on mental and physical health and the predictive value of each stress factor on ones mental and physical health.

Theoretical Implications

Theories of stress indicate there are adverse effects to one's mental health and physical health from prolonged or high levels of stress. Individuals who hold high level

jobs tend to experience large amounts of stress; being a public school superintendent would be considered a high level job by most standards (Berkly, 2002; Peterson, 2003; Glass 2007). Gmelch established that there was significant stress in a public school administrator's job (1996).

This study used Gmelch's theory of stress in administrative jobs to look at specific stress factors to determine if there was a relationship between the four stress factors and the mental health and physical health of superintendents. This study of relationships was done by answering the following six research questions:

1. Is there a relationship among the four stress factors and the mental health of a public school superintendent?
2. Is there a relationship among the four stress factors and the physical health of a public school superintendent?
3. Do the four stress factors impact or predict the mental health of a public school superintendent?
4. Do the four stress factors impact or predict the physical health of a public school superintendent?
5. Which of the four stress factors is a stronger predictor of the mental health of a public school superintendent?
6. Which of the four stress factors is a stronger predictor of the physical health of a public school superintendent?

Effect on Mental health

Question one focused on the relationship of job stress and the mental health of a public school superintendent. Findings indicated that there was a significant relationship

between all four specific stress factors and the mental health of superintendents. The relationship to mental health was more significant than the relationship to physical health as addressed in research question two. Conflict mediating stress presented a very significant relationship to both mental and physical health. Conflict mediating stress occurs when the superintendent is caught in political situations that may involve staff, parents, students, the school board and/or the community. The conflict can originate either from within the school district itself or outside the district (Tortelli & Gmelch, 1993).

This finding was important because few studies focus on specific stress factors as they relate to the mental health of public school superintendents. In addition, most studies on stress focus on stress and its effects in general, this study was specific to the job by using the four stress factors. By understanding specific situations that cause the most stress for them, superintendents can adjust their behaviors and seek support to handle these situations, thus decreasing the amount of stress they experience. In addition, school boards can use this information to provide support for the superintendent. This support may prevent early retirement or resignations of quality superintendents.

Theories of stress indicate that stress in one's life leads to health issues, both mental and physical. However, many of the issues that affect one's mental health and physical health are preventable (Criswell, 2007; Rice, 2000; Ursin, 2004). This study focused on specific stress factors. Prevention of stress could be easier to accomplish if the superintendent used the specific tasks and behavior identified by the four stress factors and the four steps that one goes through when approaching a stressful situation (Gmelch, 1996).

Studies have shown that people who hold high level positions have greater incidences of disease, depression, and poorer decision making capabilities (Berkly, 2002; Peterson, 2003). Absenteeism is a big concern for school districts and superintendents but “presenteeism, which is defined as being at work, but working at a reduce capacity” may be a bigger concern (Mattke, Balalrosjnan, Giacomo & Newberry, 2007 p. 211). The diminished capacity for performance may be reduced by using the information from the study to improve the daily functioning of superintendents as they perform their jobs.

Effect on Physical Health

Question two focused on the relationship of job stress and the physical health of the school superintendent. Findings indicated there was a significant relationship between four specific stress factors and the physical health of superintendents. The relationship to mental health was more significant than the relationship to physical health. Conflict mediating stress and physical health had the most significant correlation of the four stress factors. Conflict-mediating stress can occur from conflicts that arise in trying to satisfy the needs and wants of the staff, the school board and the community or conflicts within the district itself (Criswell, 2000; Gmelch, 1996). The relationship noted between this stress factor and the physical health of superintendents was important because few studies focus on specific stress factors as they relate to the physical health of public school superintendents. Theories of stress indicate that stress in one’s may life lead to preventable health issues such as high blood pressure, heart disease and numerous other physical health problems (Criswell, 2007; Rice, 2000; Ursin, 2004). Prolonged stress may also result in poor lifestyle choices such a poor eating habits, smoking, use of alcohol or drugs (Criswell, 2007).

Several participants indicated that poor lifestyle choices were something they struggled with in their jobs. Comments were added to the survey specific to weight gain and poor health habits. One such comment was about the difficulty in maintaining a healthy lifestyle while doing the job. Another participant commented that he had gained at least 30 pounds since he became superintendent. That same sentiment was shared by others. Comments noted on the surveys may indicate that further studies should be done with lifestyle choices rather than physical health in general.

The information from this study can be used to help superintendents focus on specific behaviors that contribute most to their personal stress. Understanding the source of one's stress is important since stress reduction can be accomplished if a superintendent knows the source of the stress. A decrease in the amount of stress experienced may possibly improve physical health and lifestyle choices which affect one's physical health.

Prediction of Mental Health

Question three focuses on the four stress factors as indicators or predictors of mental health issues. Use of a Pearson Correlation provided significant indicators in predicting mental health issues. All four stress factors, conflict mediating stress, boundary spanning, task based and role based stress provided a significant indicator of mental health for superintendents. Prediction of the effect of stress on the mental health of superintendents is significant since prediction of stress may lead to prevention. The information from this study can be used to understand which factors of the job are most stressful. The data from this study can be used in conjunction with studies that focus on

the prevention of stress. A personal focus on the cause and its prevention may help improve the mental health of superintendents and thus extend their tenure in the job.

Prediction of Physical Health

Question four focuses on the four stress factors as indicators or predictors of physical health issues. Uses of a Pearson Correlation provided that all stress factors had a relationship and were significant indicators in predicting physical health issues. The ability to predict the effect of the four stress factors on one's physical health is not as significant as the predictors for mental health which may indicate an implication for further study since it is assumed that stress and physical health are most closely related in high level positions.

Strongest Predictor of Mental Health

The stress factor of conflict mediating was the strongest indicator of mental health issues among public school superintendents. This factor had a t score of -11.849. (See Table 6) Conflict mediating stress is prevalent in the job of superintendent because they are trying to satisfy staff, parents, the school board and the community. The conflict occurs within the school district and outside the district (Criswell, 2007; Gmelch, 1996). This predictive factor is important to the body of knowledge regarding stress management for superintendents. Stress management is a key factor to improving the tenure of superintendents and improving their productivity while on the job (Glass, 2007; Rice, 2000). Superintendents can use the predictive knowledge of this study to begin prevention strategies that may alleviate or diminish the amount of stress experienced in the conflicting mediating area of their job. By decreasing their stress, they may decrease the mental health factors caused by stress such as depression, memory loss, irritability,

social withdrawal, anxiety, or an underlying sense of persistent anger (Jones, 2001; Wainwright, 2002).

Strongest Predictor of Physical Health

All four of the stress factors were significant indicators of physical health issues, however conflicting mediating stress was the strongest predictor or indicator of physical health issues among superintendents. This factor had a t score of -4.192, which is considered significant. The conflict mediating stress factor was a significant predictor for mental health as well. Therefore, this knowledge is helpful in understanding the extent to which the conflict mediating stress factor affects the overall health of a superintendent.

Implications for Theory Development

This study was conducted using a cognitive theory of stress as its foundation. The findings confirm the global effects of stress on the health of individuals who experience high levels of stress or who experience prolonged stress. The findings can also add to the theory by addressing each of the four stress factors individually. Gmelch (1996) defined four stages of stress: In the first stage, an event occurs that affects the individual. The second stage is the interpretation of the stimulus. The third stage is the response to stimulus based on the interpretation in stage two; this includes deciding if the individual will cope with the stressor, or if he/she will succumb to its effect. The fourth stage is the consequence that occurs when a person succumbs to the stressor. Using the four stages that determine stress in combination with each stress factor a superintendent can assess the amount of stress they might experience. This study indicates that each of the four stress factors had an effect on the mental or physical health of the superintendent. By

addressing each factor separately, the superintendent can prevent some of the stress experienced on the job.

The factor that had the most predictive value for both mental and physical health was conflict mediating stress. If the superintendent understands that conflict mediating stress occurs when political conflicts arise. These political conflicts can be with the school board, parents, staff, community, or during negotiations with the teacher organizations. These conflicts are especially trying because they have implications that may affect one's job, but understanding the stages of stress, the superintendent can gain control in their responses to this stress factor. For example, the superintendent is scheduling negotiations with the local education association. The first stage of stress is the event; scheduling the negotiations. The second stage is the assessment or the interpretation of how the negotiations may progress. The superintendent may ask themselves if they feel competent to adequately handle the negotiation process. The third stage is deciding if they will meet the situation head on and be prepared or will they succumb to the situation and accept the situation as a stressor. The superintendent must decide if he/she can prepare for the situation. They will need to assess if they can gain control of their situation, or do they need to get assistance. The superintendent will need to decide if they feel adequate in this situation. The fourth stage is the outcome or the consequence of the situation, in this example the negotiations. If the superintendent understands the four stages for each of the four stressors, he/she can prepare and prevent a lot of stress before it occurs. Prevention of stress will improve the mental health and physical health of the superintendent. The use of cognitive theories to help prevent or

decrease the levels of stress adds to the body of knowledge in the area of stress and stress management.

Implication for Practice

This study provides several implications for practice specific to superintendents and the organizations that work with them. The first implication is for superintendents who are seeking a position as a public school superintendent for the first time or who are looking for new position. Knowledge of the four stress factors could be used to determine if they are accepting a position that will have a negative impact on their physical and mental health. By understanding the components of the four stress factors the candidate can determine if the position is a good fit or if they are prepared to take a position that by its nature has specific stressors.

For example, role-based stress can result from confusion about what is expected from the superintendent on the job. Tortelli and Gmelch (1994) stated in their study that if an administrator does not understand his/her role and responsibilities this lack of understanding is a source of stress. A superintendent should also expect differences to occur between them and their board regarding the expectations of the job; these differences will also increase stress. In other words, superintendents must understand what the position entails. The school board may assume that the superintendent will function as a change agent, while the superintendent is thinking he/she should be focusing on the finances of the district and function as a CEO. Conflict occurs and the board/superintendent relationship becomes strained. There is a role conflict that was unexpected. If the candidate has used this study to determine a fit for the job prior to

accepting the position, it would help decrease the role based stress experienced during the job

Task based stress is another stress factor that can be valuable to understand either prior to accepting a position. Task based stress occurs when one does not feel adequate to complete a job or qualified to handle various jobs that may be expected of the superintendent. School districts of various sizes have differing job descriptions. Candidate should understand the requirements for their district of choice prior to accepting a job that may not match their level of preparation. If the superintendent is already on the job, this stress factor can be managed by seeking professional development or training to be better prepared to handle the multiple tasks required in their particular district. An understanding of task based stress can assist the superintendent in decreasing it at its source and thus improving their mental and physical health.

Boundary spanning stress is related to external conditions such as conflicts with the community, school board or parents and most recently the federal mandates that the government has imposed. An example of boundary spanning stress might be when a superintendent does not want to participate in all of the community events as part of their job, but the community expects him/her to be a part of all community activities. Another example might be the involvement of the federal government and demands that are not aligned with the local school district's wants and needs. Schools are no longer locally controlled and superintendents are expected to participate in a number of activities that may not be of interest to the community. Boundary spanning stress occurs when responsibilities encroach on the family or personal time. If a superintendent understands the expectations of the job, the boundary spanning stress will decrease. Organizations or

institutions of higher learning should prepare candidates to deal with this type of stress. Understanding the four stress factors, providing mentoring for superintendents and improving preparation for the high stress job of superintendent will help candidates begin to take control of their personal stress levels.

This study has discussed the significant impact that conflict mediating stress has on both mental health and physical health. It not only had the strongest relationship to mental and physical health, but it is also the strongest predictor of mental and physical health issues. The implication for practice speaks strongly to the need for improved preparation for the position by institutions of higher learning. It also exposes a need for professional development that specifically addresses the stress factors especially conflict mediation. The professional development should prepare superintendents to handle the process of conflict management as well as understand the amount of stress that occurs from conflict in the profession of public school superintendent. In addition, mentoring programs should assist mentors in helping superintendents cope with the stress of the job and be aware of the impact conflict mediating stress has on new superintendents as well as those established in their careers.

All four stress factors have an effect on superintendents; therefore those factors need to be addressed by institutions of higher learning in their college courses, by the State Department of Education in the area of professional development and mentoring and within the professional organizations for administrators. Since conflict mediating stress was the factor that had the strongest relationship and was the strongest predictor of mental and physical health, special attention should be paid that stress factor.

Implications for Further Research

Stress has been shown to affect both mental and physical health adversely. This study looked at each stress factor separately and determined there was a correlation between the four stress factors and both physical and mental health. It would be prudent to acknowledge that one could assume a intertwining relationship between mental health and physical health. Physical health could affect mental health and physical health could affect mental health. It would be beneficial to determine how much of a relationship mental health and physical health have on each other and in relationship to stress. It could be assumed that a distinct line could not be drawn between mental health and physical health. This possible relationship would be a topic for further study.

Replication of this study could provide additional information that may serve to validate the findings of this study. Expanding the population of the study, it might serve to generalize the information to more superintendents. In addition, a replication that corrected the omissions on the demographics section of this study would be beneficial. One of the limitations of this study was the omission of gender in the demographics section of the questionnaire. Extending the research to include gender in the data collection process and analysis would be beneficial. This would be timely and valuable information considering the increasing number of women entering into the job. Ethnicity was also omitted as a demographic variable. Increasing numbers of minority superintendents are securing the job and further study in relationship to ethnicity would provide valuable data for research.

Further studies need to be conducted using the specific stress factors related to superintendents. Based on the comments added to the surveys by participants, more

study in this area would provide information to the superintendents that would be of value to them personally. It would serve to validate to themselves and others the amount of stress the job entails and the effect of the job has on individuals. Several superintendents shared comments with the researcher that indicated they would be willing and interested in providing qualitative data to be used in this area of study.

Summary of Findings

The four stress factors as defined in this study were analyzed using SPSS to obtain a Pearson Correlation to determine if there was a relationship that would allow further analysis using linear regression. All four stress factors indicated significant relationships to both mental health and physical health. Each stress factor had some predictive value when paired with mental health. The relationship of the stress factors with physical health, while not as significant in effect did indicate a significant predicative value on the effect on one's physical health. All four stress factors indicated a significant relationship and predictive value when paired with physical health indicating a significantly strong predictor of stress on physical health.

Although several studies indicate that job stress is prevalent in all occupations (Gmelch, 1996; Rice 2000; Welch, 2004). The data from this study is specific to the job of public school superintendent allowing the superintendent to use it to help understand the factors that cause the most stress and have the most effect on their mental health. Knowing that four specific stress factors can help predict the effect of these stress factors on mental health issues and on physical health issues can benefit the superintendent and encourage them to take preventative measures to protect their mental health by decreasing the stress based on the tasks that make up the four stress factors.

It is also of interest to note this study confirms the theory of general stress and its affect on all health. This study would also indicate that mental health seems to be the most significant health variable. It is a societal assumption that stress has adverse affects on physical health, but with the results of this study, it would indicate that mental health issues should be studied further to determine more needs to be done to mentally prepare candidates for the position.

Summary

This study establishes that the four stress factors all have a relationship on the mental health and physical health. The stress factor of conflicting mediation is the most significant in its relationship to both mental health and physical health. It is the factor that has the most predictive value on mental health and physical health. It also has strongest statistical relationship to superintendent stress.

This information may be beneficial personally for the superintendents by providing information that may help prevent the effects of stress on the mental and physical health, possibly preventing the need for early retirement. The data provides a predictive value that may be translated into preventive value for the superintendent who is experiencing a great deal of stress, which according to Glass is nearly 60% of them (2007).

This study provides leaders at the state level of education and school boards in Oklahoma Public Schools with more information on how to improve retention of experienced and quality candidates for superintendent through focusing on the predictors of mental health and physical health to decrease stress and increase job satisfaction. This knowledge could allow school leaders at all levels to assist superintendents in decreasing

their stress and thus improving their mental health and physical which could improve productivity (Josephson et al., 2008) and longevity in the profession (Glass 2007).

This study gives insight into the possibility that mental health is affected more than physical health by the four stress factors. It has been assumed that the dangerous implications of stress were to ones physical health in most instances. This study would provide a springboard for conversations and further studies that could focus on the importance of the guarding ones mental health in addition to guarding ones physical health.

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APPENDICES

Appendix 1

Modified Administrative Stress Index

**For the following questions
please consider if the stress scenario applies to you.**

—————
 If it **does not** apply
Select the Not Applicable box
 Skip the Frequency and Intensity options

—————
 If it **does** apply
 Skip the Not Applicable box
Select a rating for the Frequency and Intensity options

	Not Applicable	Very Rarely	Rarely	Occasionally	Frequently	Very Frequently
Being interrupted by telephone calls.	<input type="checkbox"/>					
Frequency		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Intensity		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Not	Very	Rarely	Occasionally		Very

	Applicable	Rarely			Frequently	Frequently
Supervising and coordination the tasks of many people.	<input type="checkbox"/>					
Frequency		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Intensity		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Not Applicable	Very Rarely	Rarely	Occasionally	Frequently	Very Frequently
Feeling staff members don't understand my goals and expectations.	<input type="checkbox"/>					
Frequency		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Intensity		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Not Applicable	Very Rarely	Rarely	Occasionally	Frequently	Very Frequently
Feeling I am not fully qualified to handle my job.	<input type="checkbox"/>					
Frequency		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Intensity		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Not Applicable	Very Rarely	Rarely	Occasionally	Frequently	Very Frequently
Knowing I can not get information needed to carry out my job properly.	<input type="checkbox"/>					
Frequency		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Intensity		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Not Applicable	Very Rarely	Rarely	Occasionally	Frequently	Very Frequently
Thinking that I will not be able to satisfy the conflicting demands of those who have authority over me.	<input type="checkbox"/>					
Frequency		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Intensity		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	Not Applicable	Very Rarely	Rarely	Occasionally	Frequently	Very Frequently
Trying to resolve differences between/among students.	<input type="checkbox"/>					
Frequency		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Intensity		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Not Applicable	Very Rarely	Rarely	Occasionally	Frequently	Very Frequently
Feeling not enough is expected of me by the board members.	<input type="checkbox"/>					
Frequency		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Intensity		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Not Applicable	Very Rarely	Rarely	Occasionally	Frequently	Very Frequently
Having my work interrupted by staff members who just want to talk.	<input type="checkbox"/>					
Frequency		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Intensity		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	Not Applicable	Very Rarely	Rarely	Occasionally	Frequently	Very Frequently
Imposing excessively high expectations on myself.	<input type="checkbox"/>					
Frequency		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Intensity		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Not Applicable	Very Rarely	Rarely	Occasionally	Frequently	Very Frequently

Feeling pressure for better job performance over and above what I think is reasonable	<input type="checkbox"/>					
Frequency		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Intensity		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Not Applicable	Very Rarely	Rarely	Occasionally	Frequently	Very Frequently
Writing memos, letters, and communications.	<input type="checkbox"/>					
Frequency		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Intensity		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Not Applicable	Very Rarely	Rarely	Occasionally	Frequently	Very Frequently
Trying to resolve differences with my board members.	<input type="checkbox"/>					
Frequency		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Intensity		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Not Applicable	Very Rarely	Rarely	Occasionally	Frequently	Very Frequently
Speaking in front of groups.	<input type="checkbox"/>					
Frequency		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Intensity		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Not Applicable	Very Rarely	Rarely	Occasionally	Frequently	Very Frequently
Attempting to meet social expectations (housing, clubs, friends, etc).	<input type="checkbox"/>					
Frequency		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Intensity		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	Not Applicable	Very Rarely	Rarely	Occasionally	Frequently	Very Frequently
Not knowing what my board thinks of me or how they evaluate my performance.	<input type="checkbox"/>					
Frequency		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Intensity		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Not Applicable	Very Rarely	Rarely	Occasionally	Frequently	Very Frequently
Having to make decisions that affect the lives of individual people that I know (colleagues, staff members, students, etc.)	<input type="checkbox"/>					
Frequency		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Intensity		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Not Applicable	Very Rarely	Rarely	Occasionally	Frequently	Very Frequently
Feeling I have to participate in school activities outside of the normal working hours at the expense of my personal time.	<input type="checkbox"/>					
Frequency		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Intensity		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Not Applicable	Very Rarely	Rarely	Occasionally	Frequently	Very Frequently
Feeling that I have too much responsibility delegated to me by the board of education.	<input type="checkbox"/>					
Frequency		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Intensity		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Not	Very	Rarely	Occasionally		Very

	Applicable	Rarely			Frequently	Frequently
Trying to resolve parent/school conflicts.	<input type="checkbox"/>					
Frequency		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Intensity		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Not Applicable	Very Rarely	Rarely	Occasionally	Frequently	Very Frequently
Preparing and allocating budget resources	<input type="checkbox"/>					
Frequency		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Intensity		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Not Applicable	Very Rarely	Rarely	Occasionally	Frequently	Very Frequently
Feeling that I have too little authority to carry out responsibilities assigned to me.	<input type="checkbox"/>					
Frequency		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Intensity		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Not Applicable	Very Rarely	Rarely	Occasionally	Frequently	Very Frequently
Handling student discipline problems.	<input type="checkbox"/>					
Frequency		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Intensity		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Not Applicable	Very Rarely	Rarely	Occasionally	Frequently	Very Frequently
Being involved in the collective bargaining process.	<input type="checkbox"/>					
Frequency		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Intensity		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



	Not Applicable	Very Rarely	Rarely	Occasionally	Frequently	Very Frequently
Evaluating staff member's performance.	<input type="checkbox"/>					
Frequency		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Intensity		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Not Applicable	Very Rarely	Rarely	Occasionally	Frequently	Very Frequently
Feeling that I have too heavy a work load, one that I cannot possibly finish during the normal work day.	<input type="checkbox"/>					
Frequency		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Intensity		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Not Applicable	Very Rarely	Rarely	Occasionally	Frequently	Very Frequently
Complying with state, federal and organizational rules and policies.	<input type="checkbox"/>					
Frequency		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Intensity		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Not Applicable	Very Rarely	Rarely	Occasionally	Frequently	Very Frequently
Feeling that the progress of my job is not what it should or could be.	<input type="checkbox"/>					
Frequency		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Intensity		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Not Applicable	Very Rarely	Rarely	Occasionally	Frequently	Very Frequently
Administrating the negotiated contract (grievances, interpretation, etc).	<input type="checkbox"/>					



Frequency	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Intensity	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Not Applicable	Very Rarely	Rarely	Occasionally	Frequently
Being unclear on just what the scope and responsibilities of my jobs are.	<input type="checkbox"/>				
Frequency	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Intensity	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	Not Applicable	Very Rarely	Rarely	Occasionally	Frequently	Very Frequently
Feeling that meetings take too much time.	<input type="checkbox"/>					
Frequency	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Intensity	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Not Applicable	Very Rarely	Rarely	Occasionally	Frequently	Very Frequently
Trying to complete reports and paperwork on time.	<input type="checkbox"/>					
Frequency	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Intensity	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Not Applicable	Very Rarely	Rarely	Occasionally	Frequently	Very Frequently
Trying to resolve differences between/among staff members.	<input type="checkbox"/>					
Frequency	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Intensity	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Not Applicable	Very Rarely	Rarely	Occasionally	Frequently	Very Frequently

Trying to influence my board's actions and decisions that affect me.	<input type="checkbox"/>					
Frequency		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Intensity		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Not Applicable	Very Rarely	Rarely	Occasionally	Frequently	Very Frequently
Trying to gain public approval and/or financial support for school programs.	<input type="checkbox"/>					
Frequency		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Intensity		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Please add any other situations about your job that create stress for you that are not included in the above survey. Rate them for frequency and intensity as you did above.

	Not Applicable	Very Rarely	Rarely	Occasionally	Frequently	Very Frequently
	<input type="checkbox"/>					
Frequency		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Intensity		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Not Applicable	Very Rarely	Rarely	Occasionally	Frequently	Very Frequently
	<input type="checkbox"/>					

Frequency	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Intensity	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Not Applicable	Very Rarely	Rarely	Occasionally	Frequently
	<input type="checkbox"/>				
Frequency	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Intensity	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Not Applicable	Very Rarely	Rarely	Occasionally	Frequently
	<input type="checkbox"/>				
Frequency	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Intensity	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

In general, would you say your health is:

Excellent <input type="checkbox"/>	Very good <input type="checkbox"/>	Good <input type="checkbox"/>	Fair <input type="checkbox"/>	Poor <input type="checkbox"/>
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Compared to one year ago, how would you rate your health in general now?

Much better now than one year ago <input type="checkbox"/>	Somewhat better now than one year ago	About the same as one year ago	Somewhat worse now than one year ago	Much worse now than one year ago
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	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**The following questions are about activities you might do during a typical day.
Does your health now limit you in these activities?**

If so, how much?

	Yes, limited a lot	Yes, limited a little	No, not limited at all
Vigorous activities, such as running, lifting heavy objects, participating in strenuous sports	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Moderate activities, such as moving a table, pushing a vacuum cleaner, bowling, or playing golf	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Lifting or carrying groceries	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Climbing <u>several</u> flights of stairs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Climbing <u>one</u> flight of stairs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Bending, kneeling, or stooping	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Walking <u>more than a mile</u>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Walking <u>several hundred yards</u>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Walking <u>one hundred yards</u>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Bathing or dressing yourself	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

During the past 4 weeks, how much of the time have you had any of the following problems with your work or other regular daily activities as a result of your physical health?

	All of the time	Most of the time	Some of the time	A little of the time	None of the time
Cut down on the amount of time you spent on work or other activities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Accomplished less than you would like	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Were limited in the kind of work or other activities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Had difficulty performing the work or other activities (for example, it took extra effort)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

During the past 4 weeks, how much of the time have you had any of the following problems with your work or other regular daily activities as a result of any emotional problems (such as feeling depressed or anxious)?

	All of the time	Most of the time	Some of the time	A little of the time	None of the time
Cut down on the amount of time you spent on work or other activities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Accomplished less than you would like	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Did work or other activities less carefully than usual	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

During the past 4 weeks, to what extent has your physical health or emotional problems interfered with your normal social activities with family, friends, neighbors, or groups?

Not at all <input type="checkbox"/>	Slightly <input type="checkbox"/>	Moderately <input type="checkbox"/>	Quite a bit <input type="checkbox"/>	Extremely <input type="checkbox"/>
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How much bodily pain have you had during the past 4 weeks?

None <input type="checkbox"/>	Very mild <input type="checkbox"/>	Mild <input type="checkbox"/>	Moderate <input type="checkbox"/>	Severe <input type="checkbox"/>	Very severe <input type="checkbox"/>
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During the past 4 weeks, how much did pain interfere with your normal work (including both work outside the home and housework)?

Not at all <input type="checkbox"/>	Slightly <input type="checkbox"/>	Moderately <input type="checkbox"/>	Quite a bit <input type="checkbox"/>	Extremely <input type="checkbox"/>
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**These questions are about how you feel and how things have been with you during the past 4 weeks.
For each question, please give the one answer that comes closest to the way you have been feeling.**

How much of the time during the past 4 weeks...

	All of the time	Most of the time	Some of the time	A little of the time	None of the time
Did you feel full of life?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Have you been very nervous?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Have you felt so down in the dumps that nothing could cheer you up?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Have you felt calm and peaceful?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Did you have a lot of energy?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Have you felt downhearted and depressed?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Did you feel worn out?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Have you been happy?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Did you feel tired?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

During the past 4 weeks, how much of the time has your physical health or emotional problems interfered with your social activities (like visiting friends, relatives, etc.)?

All of the time <input type="checkbox"/>	Most of the time <input type="checkbox"/>	Some of the time <input type="checkbox"/>	A little of the time <input type="checkbox"/>	None of the time <input type="checkbox"/>
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How TRUE or FALSE is each of the following statements for you?

	Definitely True	Mostly true	Don't know	Mostly false	Definitely false
I seem to get sick a little easier than other people	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I am as healthy as anybody I know	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I expect my health to get worse	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
My health is excellent	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Demographics

What is your age			
Under 30 <input type="checkbox"/>	30 to 39 years <input type="checkbox"/>	40 to 49 years <input type="checkbox"/>	60 years or over <input type="checkbox"/>

Which administrative category best describes your superintendence?	
Superintendent with building principals	<input type="checkbox"/>
Sole administrator	<input type="checkbox"/>
Superintendent/elementary principal combination	<input type="checkbox"/>
Superintendent/secondary principal combination	<input type="checkbox"/>

What is the highest degree you hold?		
Master's Degree	Ed. Specialist	Ed.D. or Ph.D
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

What is the size of your district?			
0-499	500-799	800-1,499	Over 1,500
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

What is the location of your district?				
NE	NW	SE	SW	Central
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

What is the type of your district?		
Rural	Urban	Suburban
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

How many years have you been a superintendent?					
1 - 2	3 - 5	6 - 10	11 - 15	16 - 20	More than 20
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

How many hours a week do you work?	<input type="text"/> hours
What is the percentage of your total stress you attribute to your job?	<input type="text"/> %

Please click the "Submit" button to complete the survey

VITA

Kathy J. Carroll

Candidate for the Degree of

Doctor of Education

Dissertation: CONSEQUENCES OF STRESS FOR PUBLIC SCHOOL SUPERINTEDENTS

Major Field: Educational Leadership

Education:

Completed the requirements for the Doctor of Education in Educational Leadership at Oklahoma State University, Stillwater, Oklahoma in July, 2010

Completed the requirements for the Master of Science in School Counseling at Northeastern State University, Tahlequah, Oklahoma, in 1996.

Completed the requirements for the Bachelor of Science in Elementary Education at Oklahoma Wesleyan University, Bartlesville, Oklahoma in 1989.

Experience: Superintendent-Carnegie Public Schools

Present

Superintendent-Rush Springs Public Schools

2007-2010

Director Special Programs-Nowata Public Schools

July 2000-2007

Elementary Counselor-Nowata Elementary School

Classroom Teacher-Nowata Public Schools

Professional Memberships:

Member of Cooperative Council for Oklahoma School Administration

Member of OROS

Member of Lions Club

Name: Kathy J. Carroll

Date of Degree: July, 2010

Institution: Oklahoma State University

Location: Stillwater, Oklahoma

Title of Study: CONSEQUENCES OF STRESS FOR PUBLIC SCHOOL
SUPERINTENDENTS

Pages in Study: 85.....Candidate for the Degree of Doctor of Education

Major Field: Educational Leadership

Scope and Method of Study: This study is a quantitative study of Oklahoma Public School Superintendents. The data was collected by surveys using an online format. Data was analyzed to determine correlation and predictive values of the four specific stress factors: conflict mediating stress, boundary spanning stress, task based stress and role based stress related to the mental health and physical health of the public school superintendents.

Findings and Conclusions: A significant statistical relationship was noted between all four stress factors and both mental health and physical health. Linear regression indicated that the four stress factors were strong predictors for both mental and physical health Conflict mediating stress was the strongest predictor for both mental and physical health. The strongest relationship was noted between the stress factors and mental health. The predictors or indicators were also strongest for mental health.

ADVISER'S APPROVAL: Dr. Mwarumba Mwavita
