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Work-Related Stress and Coping Strategies for Elementary Teachers

Sonia OBryan

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Work-Related Stress and Coping Strategies for Elementary Teachers

by

Sonia M. O'Bryan

A Dissertation

Submitted to the Graduate Faculty of

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Abstract

The purpose of the study was to examine kindergarten through fifth grade teachers' responses regarding their work-related stressors, the type of manifestations of stress, both emotional and/or behavioral, they experienced due to work-related stress, and their identification of coping strategies used to reduce their work-related stress. The teachers who participated in the study were from identified school districts in northern Minnesota. The study participants completed a 21 question online survey based on the Teacher Stress Inventory developed by Dr. Michael J. Fimian in 1984 and through the researcher's teaching experiences.

The intent of the study was to assist classroom teachers and their administrators in acknowledging that work-related stress does exist and that there are strategies that could assist teachers with coping with work-related stressors.

Study findings revealed kindergarten through fifth grade teachers in select northern Minnesota schools reported the most noticeable work-related stressors were described by the following statements: there is too much work to do; student behaviors negatively impact my ability to perform my job; there is little time to prepare for my lessons/responsibilities; and my personal priorities were being short-changed due to time demands at work. Those most noticeable work-related stressors represent emotional manifestations of stress.

Physical manifestations of stress reported by the study participants included: feeling tired before arriving to work; physical exhaustion; and becoming fatigued over a short period of time.

The coping strategies most used to cope with work-related stressors were identified by study participants as personal and family relationships, physical activity, and entertainment.

The study results indicated that teachers should be made aware that they could benefit from implementing coping strategies to address work-related stress and that those strategies, such as mindfulness and healthy habits and relationships, provide ways to manage their stress.

Furthermore, school districts leaders should be cognizant of the immense stress teachers experience and, as a result, invest in professional development opportunities, such as mindfulness-based programs, that can be customized to address this important issue.

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Dedication

This dissertation is dedicated to my daughter, Esabelle. You are wiser than your years and have had to be more patient than any eight year should, but you have been my sunshine on dark days and have made this journey worthwhile. I hope someday you will understand that the sacrifices made were so your future could be brighter. I love you to the moon and beyond!

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Chapter 1: Introduction

While teachers may find personal satisfaction in teaching, it can also result in stress, burnout, and leaving the profession (Hanushek, 2007; Ingersoll & Smith, 2003).

There are many researchers who have identified possible causes of work-related stress for teachers. Causes such as; larger class sizes, increased parental concerns, decreasing support, intensified stressors, weak administration, low salaries, working environment, school culture, Type A personalities of teachers, student misbehavior, and work overload (Fisher, 2011).

In a study by Sorenson (2007) he discussed how teachers in the 21st century were in, what was labeled as, active jobs by Karasek and Theorell as cited by Jazzar and Algozzine (2006). Active jobs for teachers include substantial expectations, such as improving student achievement and overall school improvement through accountability measures, testing, and policy reforms (Sorenson, 2007).

An article from Mental Health America (2010) reported moderate levels of stress might motivate teachers, while too much stress may decrease teacher desire to stay in the profession and lead to burnout. These factors may be the reason the departure rate of teachers has been reported to be significantly higher compared to other professions (Minarik, Thornton, & Perreault, 2003).

In 2007, it was reported 33% to 50% of teachers left the profession within the first 5 years of their employment (Hanushek, 2007; Ingersoll, & Smith, 2003). The attrition rates of teachers departing may be attributed to the transition from being a student to becoming a teacher (Conroy, as cited in Fisher, 2011). While the percentage decreased by 2012, the U.S. National Center for Educational Statistics reported 17% of teachers still leave the profession within 5 years of having been employed (Cox, Parmer, Tourkin, Warner, & Lyter, 2007; Ingersoll, 2012).

Studies such as McCarthy, Lambert, O'Donnell, & Melendres (2009) have shown that teaching is a stressful career and can lead to teachers suffering burnout. In a study by Demjaha, Bislimovska, & Mijakoski (2015) they confirmed that, as a profession, teaching is progressively becoming a stressful occupation due to increased responsibilities and demanding deadlines. Additionally, it was reported that there was a significantly higher departure rate of teachers compared to any other profession (Minarik et al., 2003).

Teachers are a vital group of professionals and play an important role in the success of their students (Sinclair & Ryan, 1987). Consequently, it is crucial for schools and school district administrators, professors of teacher preparation programs, and teachers themselves to become educated on work-related stressors and strategies to help teachers manage and cope with the stresses of their jobs (American Psychological Association [APA], 2017a; Gold & Roth, 2013; Skaalvik & Skaalvik, 2015).

According to Fisher (2011), school leaders are not undertaking sufficient strategies to combat teacher stress in order to retain their teachers. Some strategies school leaders could implement included improved professional development, mentors for new teachers, or allocated time for teacher collaboration. These strategies have been found to reduce teacher stress levels (Fisher, 2011, p. 10). Professional development is deemed necessary to educate teachers on how to combat and utilize strategies to cope with the unavoidable demands of the job and the stresses of the profession (Jepson & Forrest, 2006).

In 1977, teacher stress was defined as “a response by a teacher or negative affect...as a result of the demands made upon the teacher in his role as a teacher,” which included “the degree to which the teacher perceived that he is unable to meet the demands made upon him” (Kyriacou and Sutcliffe, 1977). Lazarus and Folkman (1987), developed a theoretical transactional model

of stress which hypothesized that when a person encountered life demands, a reflective transaction occurs in which the person weighed perceived demands of the event against her/his perceived capabilities for coping with it (Lazarus & Folkman as cited in Antoniou, Ploumpi, Ntalla, 2013). Sapolsky (1998) stated, that when the transaction resulted in a perception that the demands of the event outweighed the available resources for coping, a stress response occurred (Sapolsky, as cited in McCarthy et. al., 2009). This model was frequently cited as the most well-known approach for understanding stress (Hobfoll, Schwarzer, & Chon, 1998).

Work-related stress can produce physical and emotional manifestations according to *Stress Effects on the Body* published by the American Psychological Association help center (APA, 2017b). Elkin (1999) reported that 75% to 90% of doctor visits were for medical issues related to stress due to physiological changes usually associated with stress (Elkin, as cited in Sorenson, 2007). As reported by researchers Kirsta (1987) and Nathan et al. (1989), examples of physiological manifestations and stress included intestinal distress, frequent illness, insomnia, constant fatigue, irritability, increased use of alcohol, rapid pulse, headaches, high blood pressure, high cholesterol, and chest pains (Kirsta and Nathan et. al., as cited by Sorenson, 2007).

Critical to managing stress are the use of coping strategies. Coping strategies have appeared in the literature since 1974 when Freudenberger (1974) identified exercise, talking to others with similar experiences, and seeking professional help as methods for coping with work-related stress (Freudenberger, 1974). While not a comprehensive list, more recent coping methods include mindfulness (Skinner & Beers, 2016) and *Stress won't go away? Maybe you are suffering from chronic stress, APA's help center article suggested developing healthy*

responses, establishing boundaries, and getting support (APA, 2017c) as strategies to cope with work-related stress.

Statement of the Problem

Teachers have an important role in the success of their students, but work-related stress can negatively affect teachers' performance (Sinclair & Ryan, 1987). Therefore, a study of teachers' awareness of work-related stressors, including the physical and emotional manifestations of stress and coping strategies to reduce stress is needed. There is a lack of research regarding elementary teachers' work-related stress in schools located in northern Minnesota. This study could provide information and insight for teachers and administrators in that region which in turn can direct teacher professional development efforts regarding reducing work-related stress and providing options for coping strategies.

It has been suggested by Leithwood et. al. (1999) that school district leaders recognize stress as a daily part of a teacher's life, and one of the responsibilities of school leaders is to support their staff by providing the necessary resources for performing their job or minimizing the job demands placed on their teachers (Leithwood et. al., as cited in Hakanen, Bakker, & Schaufeli, 2006). When administrators have implemented strategies that do not sufficiently reduce stress, however, the result often times is that teachers leave the profession (Fisher, 2011). The impact of teacher turnover is detrimental to student learning and overall student achievement (Darling-Hammond, 2003; Guin, 2004; Sorenson, 2007).

After a review of literature, the researcher determined a study of a select sample of Minnesota teachers could provide information that could be of value to district and school administrators in implementing strategies to assist their teachers cope with job-related stress.

The review of literature did not identify that a study had been conducted pertaining to the examination of stress among select northern Minnesota teachers.

Purpose of the Study

The purpose of the quantitative study is to identify the most noticeable work-related stressors, the physical and emotional manifestations of work-related stress, and coping strategies used to reduce stress as reported by K-5 teachers in select northern Minnesota elementary schools. The study results could prove beneficial to school district administrators who provide professional development and support for teachers; teachers themselves could also find the study results insightful as they explore ways to reduce work-related stress; and to teacher preparation programs.

Conceptual Framework

The conceptual framework of the study is based on the Teacher Stress Inventory developed by Dr. Michael J. Fimian in 1984.

The Teacher Stress Inventory was originally developed for public school teachers who taught regular and special needs students. The Teacher Stress inventory was first piloted and then employed with a broad sample of teachers in eight states. Fimian (1988) explained that the Teacher Stress Inventory should be used exclusively with regular public school teachers involved in teaching regular or special education students in grades 1 through 12. Teacher Stress Inventory Total Stress Score norms were established for regular education teachers and special education teachers; therefore, the Teacher Stress Inventory can be distributed to teachers from either group (Fimian, 1988).

Research Questions

The following research questions were developed to guide the study:

1. What did kindergarten through fifth grade classroom teachers in select northern Minnesota schools report as the most noticeable stressors they experienced in their teaching positions?
2. What did kindergarten through fifth grade classroom teachers in select northern Minnesota schools identify as the emotional and physical manifestations of work-related stress they experienced?
3. What did kindergarten through fifth grade classroom teachers in northern Minnesota schools identify as strategies they utilized to cope with work-related stressors?

Assumptions

Leedy and Ormond (2010) stated, “Assumptions are so basic that, without them, the research problem itself could not exist” (p. 62). Assumptions are those things that are out the control of the researcher, but if not there, the study would become irrelevant.

- An assumption of the study is that the participants will answer the survey questions honestly and in a manner that accurately reflects their professional opinion. In justification of this assumption, it will be made clear to participants that their anonymity will be preserved and the participants may withdraw from the study at any given time.
- Another assumption of the study is there will be adequate number of representative samples for the study research. The researcher has taken steps to ensure there is a representative sample for the study by examining the number of kindergarten through fifth grade teachers in 17 school districts within a 50-mile radius of Bemidji, MN.

- The last assumption of this study is teachers will be able to recognize stressors related to their job. A pilot of the study was performed in order to justify this assumption.

Delimitations

Delimitations are choices, made by the researcher and within the researcher's control, of the characteristics that limit the scope of the research (Simon, 2011).

- The study will be conducted only in northern Minnesota, within in a 50-mile radius of Bemidji, MN.
- Only kindergarten through fifth grade teachers in 17 districts will be surveyed.
- The study will take place in the fall of 2018, in the beginning of the school year when teachers are generally renewed as opposed to the end of the year when teachers are generally tired.
- There may be a slight risk for bias since the researcher could have had some of the teachers in a teacher preparation program. The researcher will assure the participants of anonymity.

Definitions of Terms

Burnout—feeling stressed to the point that one has no defenses, no one to rely on, and inadequate rewards to continue on (Evers, Tomic, & Brouwers, 2004; Farber, 1984; Noushad, 2008; Scott, 2006).

Disengagement—associated with exhaustion in the job resources model (JD-R model) (Demerouti, Bakker, Nachreiner, & Schaufeli, 2001).

Depersonalization—(cynicism) “negative callous, or excessively detached response to other people, usually the recipients of one's service or care” (Maslach, 1993, pp. 20, 21).

Emotional exhaustion—“emotional exhaustion refers to feelings of being emotionally overextended and depleted of one's emotional resources” (Maslach, 1993, p. 2).

Job demands—physical, psychological, social, or organizational aspects of the job requiring sustained physical and/or psychological (i.e., cognitive or emotional) effort and are therefore associated with certain physiological and/or psychological costs (Demerouti et al., 2001).

Job resources—are those physical, psychological, social, or organizational aspects of the job that are (1) functional in achieving work goals; (2) reduce job demands and the associated physiological and psychological costs; or (3) stimulate personal growth and development (Bakker, Demerouti, & Verbeke, 2004, p. 86).

Manifestations of stressors—include emotional, fatigue, cardiovascular, gastronomic, and behavior (APA, 2017b).

Physiological—the normal functions of a living thing (www.yourdictionary.com/physiological).

Role ambiguity—when people are unclear or uncertain about their expectations within a certain role, typically their role in the job or workplace (www.sk.sagepub.com/reference/edleadership/n492.xml).

Role overload—role overload exists when an individual fulfills multiple roles simultaneously and lacks the resources to perform them. It can evolve from both excessive time demands and excessive psychological demand. Role strain is an outcome of role conflict and overload (Creary & Gordon, 2016).

Teacher burnout—“a state of chronic stress that leads to physical and emotional exhaustion, cynicism, detachment, and feelings of ineffectiveness and lack of accomplishment” (Carter, 2013).

Teacher stress—an experience of negative emotions that results from teachers’ work (Kyriacou, 2001).

Work-related stress—the disparity between the external and internal job demands and the external and internal job resources (Otto, 1986).

Summary

The quantitative study is arranged into five chapters. Chapter 1 is comprised of the introduction, statement of the problem, purpose of the study, conceptual framework, the research questions that guide the study, and definitions.

The problem statement is based on previous research citing that there is a significant higher departure rate of teachers compared to any other profession. In addition, only 37% of those previously surveyed reported they were excellent or very good at managing stress (Minarik et al, 2003).

Chapter 1 also contains the purpose of the study which is to identify what kindergarten through fifth grade teachers in select northern Minnesota schools report as the most impactful stressors they experience in their teaching position; identify emotional and physical manifestations of work-related stress; and report the coping strategies teachers use to help reduce work-related stress. The study may be of great importance to school districts employers of teachers, to universities who prepare teachers, and to the teachers themselves in order to improve teacher job satisfaction and reduce attrition. Chapter 2, the literature review, lists the critical topics to be reviewed, explores relevant research on the issues related to the study, and provides

a conceptual framework on work-related stressors, manifestations of stressors, and coping strategies to manage and reduce stress. Chapter 3 provides an explanation of the research methodology. Research questions and a description of the methodology used are presented. It specifies the quantitative measures to be used in the study. The study population and participants along with the timeline and procedures involved in the proposed research are also discussed. The instrumentation and data collection methods are examined, as well the methods for the data analysis. Chapter 4 provides the findings of the research through data analysis. The results and the methods used to analyze the data are described. Chapter 5 presents findings and conclusions from the analyzed data. Limitations encountered in the study are discussed. The dissertation concludes with recommendations for further research and practice on work related stressors.

Chapter 2: Literature Review

Introduction

The purpose of the quantitative study is to identify what kindergarten through fifth grade teachers in select northern Minnesota schools report as the most impactful stressors they experience in their teaching position; identify emotional and physical manifestations of work-related stress; and report the coping strategies teachers use to help reduce work-related stress. The study may be of great importance to school districts employers of teachers, to universities who prepare teachers, and to the teachers themselves in order to improve teacher job satisfaction and reduce attrition.

The literature review explored three major themes and subsets within those themes. The first theme describes general work-related stress across many occupations and some of the manifestations of those general work-related stressors. The second theme examines teacher work-related stress; the manifestations of teacher's work-related stressors, specifically the physical and emotional manifestations, and implications of work-related stress, such as job burnout and leaving the profession. The final theme provides information on the importance of coping with general work-related stress; the methods teachers found helpful to cope with work-related stress and; information on mindfulness as a specific coping strategy for teachers and administrators to consider.

The literature review was conducted by utilizing library resources from Bemidji State University and St. Cloud State University. This research examined the following databases: ProQuest, ERIC, EBSCO, and Academic Search Premier peer-reviewed scholarly articles, dissertations and research studies relevant to the study.

The following search terms were used: “Work-Related Stress,” “Teacher Stress,” “Job Demands,” “Job Resources,” “School Factors,” “Consequences of Stress,” “Burnout,” and “Coping Strategies.” The articles’ references were also helpful in locating additional resources. Journals such as *Teaching and Teacher Education*, *Journal of Psychology*, *Journal of Instructional Psychology*, and *Journal of Educational Research* were instrumental in this literature review.

General Work-related Stress

Otto (1996) defined job stress as a disparity between the external and internal job demands and the external and internal job resources (Otto, as cited in Skaalvik & Skaalvik, 2015). Demerouti et al. (2001) defined job demands as “those physical, social, or organizational aspects of the job that require sustained physical or mental effort and are therefore associated with certain physiological and psychological costs (e.g., exhaustion) (Demerouti et al., 2001, p 501). Workload was an example of job demands (Boyle, Borg, Falzon, & Baglioni, 1995). Job resources referred to “those physical, psychological, social, or organizational aspects of the job that may do the following: a) be functional in achieving work goals; b) reduce job demands at the associated physiological and psychological costs; c) stimulate personal growth and development ” (Demerouti et al., 2001, p. 501). Resources were characterized by Richter and Hacker (1998) into two categories, external resources (e.g. organizational and social) and internal resources (e.g., cognitive features and action patterns) (Richter & Hacker, as cited in Demerouti et al., 2001). Examples of organizational resources were salary, professional development opportunities, or job security, while examples of social aspects included support from administrators, colleagues, or school culture (Demerouti et al., 2001).

The extent of job stress was different for each person, as described by Johnson et al. (2005), and was dependent on certain particulars of the job, the existence of work stressors out of the person's control, the amount of work and home support, and even the manner in which a person coped with job stress. As well, there are different stressors for different occupations. The researchers went on to say that whereas, one person may find working long hours or overnight shift work to be stressful, another may experience work stress due to their personality type. Therefore, it is within reason to suggest employees who work in high-risk careers have an elevated risk of experiencing negative stressors (Johnson et al., 2005). In a study by Johnson et al. (2005), the occupational stress among twenty-six different occupations was compared based on factors such as physical health, psychological well-being, and job satisfaction. Of the 26 ranked order occupations; ambulance workers, teachers, social service workers, customer services, prison officers, and police were reported to have worse than average scores than the other occupations in the areas of physical health, psychological well-being, and job satisfaction. Occupations, such as those listed above, have been reported as being the most stressful due to job requirements such as voice to voice or face to face interaction with clients; the need for employees to maintain their emotions, and the need to appear calm and in control in situations (Johnson et al., 2005).

Manifestations of General Work-related Stress

For the purpose of this literature review, social workers, emergency first responders, health professionals, and teachers were examined in terms of the implications and manifestations of their work-related stress. For instance, social workers who worked with adults were at particular risk of job-related stress due to a work policy requiring the implementation of Personal Budgets, known as Individual Budgets (IB). The IB assessments were client-led, outcome

focused, and allocated resources formed the budget (Wilberforce, et.al., 2014). This policy “leads to additional paperwork, may lead to greater risk for vulnerable adults, and may require skills and experience that are not commonplace among social workers” (Glendinning et al., 2008; Leece & Leece, 2010, p. 814). The Job Demand/Control (JDC) model (Karasek, 1979) was the theoretical framework used by Karasek in a study to identify the characteristics of 249 adult social service workers in England who worked with IBs. That study revealed staff involved in delivering IBs were twice as likely to be at risk for stress than those without any IBs on their caseload. That study also found a specific combination of high work pressure, lack of control over decision-making, and lack of needed resources were detrimental to job satisfaction (Karasek, 1979).

A 5-year study completed in Korea by Chung, Lee, Jung, & Nam (2015) examined the increased risk of physical and psychiatric impairments to emergency first responders, who were at an increased risk of posttraumatic stress disorder (PTSD). The researchers gathered data from 185 male firefighters, who completed specific questionnaires during their annual health examinations from 2006 to 2011. The questionnaires included personal behaviors (such as drinking alcohol, smoking, and physical exercise) and job history (duration of the job and the specific job department). The results revealed a relationship between PTSD and job stress among the experienced firefighters (Chung et al., 2015). In a research study conducted by Kirkcaldy and Martin (2000) and Tyler and Cushway (1998), health professionals showed considerable risk from the negative effects of work-related stress (Kirkcaldy & Martin, 2000; Tyler & Cushway, 1998). The General Health Questionnaire (GHQ) administered by Calan, Wainwright, Forsythe, Wall, and Almond (2001) found that 27% of health service staff were tagged as suffering from work-related stress and mental health issues as compared to 14%-18% of the general population,

who reported suffering work-related stress and mental health issues (Calan et al., 2001). Nurses, in particular, were at a high risk of turnover, absenteeism from work, and burnout as a result of the negative effects from stress-related issues on the job (Clegg, 2001; Kirkcaldy & Martin, 2000). Subsequently, in a study conducted by Kirkcaldy and Martin (2000), they found nurses exhibited higher than normal rates of physical illness, mortality, and admission into psychiatric facilities (Kirkcaldy & Martin, 2000; Mark & Smith, 2012).

Many of the above occupations, with the exception of teachers, used a job demands/control (JDC) model. Karasek and Theorell's (1990) JDC model predicted those who experienced psychological demands at an increased level, but had low levels of support and job control, suffered negative health effects. Further explained, when demands were high and control was low, high strain conditions were likely to lead to negative health consequences (Karasek & Theorell, as cited in Mark & Smith, 2012). From research studies, such as those listed above, it is clear work-related stress does not discriminate across professions.

Teacher Work-related Stress

Multiple researchers have defined teacher work-related stress, but in a variety of different ways. Kyriacou (2001) defined teacher stress as the negative emotions of the job and the related pressures and experiences teachers faced, and their inability to cope with those pressures (Kyriacou, 2001). While Jennett, Harris, and Mesibov (2003) stated stress was inevitable at work, and although the reasons differed, all teachers experienced work-related stress (Jennett et al., 2003). Simply stated, the work-related stress teachers faced resulted from negative emotions produced by their work (Hakanen et al., 2006; Kyriacou, 2001).

Lazarus and Folkman (1987), known for their theoretical transactional model of stress, proposed stress resulted when teachers encountered demands where there was an automatic

perception of those demands (i.e., stressful events) compared to their perceived capabilities to cope with those demands. If the demands outweighed the perceived available resources to cope, stress was guaranteed (Lazarus & Folkman, as cited in Antoniou et al., 2013), and a greater effort was required by teachers to sustain the expected level of performance. Factors such as external stressors had the potential to wield a negative effect on the majority of people in most circumstances (Demerouti et al., 2001). Examples of external stressors were lack of job control, lack of administrative support, and a negative social atmosphere (Hakanen et al., 2006).

Sorenson (1999) stated, “stress is a condition of twenty-first century education that continues to increase as more accountability standards and new policy initiatives are introduced” (Sorenson, 1999, p. 12).

Other instances of teacher work-related stress included requests from administration, the stressors of working with colleagues, requirements for students (i.e., accountability standards), and difficult parents. These conditions were compounded by student misbehavior, the absence of recognition for accomplishments, and excessive workloads on teachers. All of these additional stressors further burdened and drained teachers (Greenglass & Burke, as cited in Dollard, Winefield, & Winefield, 2003). Role overload, another term for excessive workload, was an example of job demands (Friedman, 1991). Creary and Gordon (2016) stated role overload exists when an individual fulfills multiple roles simultaneously and lacks the resources to perform them. It can evolve from both excessive time demands and excessive psychological demand. Role strain is an outcome of role conflict and overload (Creary & Gordon, 2016).

Role conflict was another major stressor for workers and was defined as one having conflicting job demands (Cooper & Marshall; Kahn, et. al., as cited in Friedman, 1991).

Many researchers identified other possible causes of stress. Fisher (2011) mentioned larger class sizes, increased parental concerns, decreased support, intensified stressors, weak administration, low salaries, working environment, school culture, Type A personalities, and student misbehavior (Fisher, 2011).

Sorenson (2007) discussed how teachers in the 21st century were a part of active jobs (Karasek & Theorell, as cited by Jazzar & Algozzine, 2006). Examples of active jobs included improving student achievement, overall school improvement through accountability measures and state mandated testing, and policy reforms placing substantial expectations on teachers (Sorenson, 2007). Skaalvik and Skaalvik (2007) claimed stressors such as students with behavioral issues, parent and teacher relationship problems, conflict with colleagues, and changes in instruction or teaching strategies, due to reorganization and reform, were the main causes of stress and were organized into six distinct areas: a) workload and time pressure; b) adapting teaching to students' needs; c) disruptive student behavior; d) value conflicts and lack of autonomy; e) teamwork; and f) lack of status expectations (Skaalvik & Skaalvik, 2015, p. 184). All of the above were time consuming and required additional responsibilities to an already busy workload.

Kyriacou (2001) reviewed a number of international studies and found other stressors. Those stressors included motivating and disciplining students, managing time when under a time pressure, work-related stressors including work overload, evaluations, dealing with colleagues, self-esteem and status issues, bringing on professional distress, issues when dealing with administration, role conflict or role uncertainty, and even the work environment (Kyriacou, 2001).

According to the 2017 American Psychological Association article *Coping with Stress at Work* (APA, 2017a), specific sources were linked to work-related stress. Some examples included low salaries, excessive workloads, limited prospect for advancement, reduced support, lack of control over circumstances, and the conflicting demands or vague work expectations. In a recurring 4-year staffing survey by the National Center for Educational Statistics, 32% of teachers mentioned poor working conditions as an important reason for their decision to transfer schools, and over 37% of teachers left teaching to pursue a job outside of teaching (Cox et al., 2007).

In a study conducted by Fimian and Fastenau (1990), 3,401 teachers from seven states participated in a Teacher Stress Inventory (TSI). The TSI, developed by Fimian, measured the strength of different stressful events related to the roles of teachers and how they perceived those stressors. Stressful events included: time management, work-related stress, professional distress, discipline and motivation, and professional investment and examples included:

- a) signs of time management stress included multitasking, overcommitting, being impatient with those who wasted time, and feelings of never having enough time to get things done;
- b) work-related stressors, usually environmental-specific, included a lack of preparation time, work overload, oversized classes, and mandatory paperwork;
- c) professional distress, defined as how teachers viewed themselves as professionals, came from the lack of respect teachers felt with regard to their salary, advancement, and recognition;
- d) discipline and motivation were two components of teacher-student relationships.

Discipline linked student behavior to the corresponding school policies that addresses

- the behavior. While some teachers often had good classroom management, they were stressed with the constant work of running a smooth classroom, while dealing with misbehaviors. Motivation referred to the stress teachers experienced when students were capable of doing the work, but were poorly motivated;
- e) professional investment included what lacked in their job; lack of job control in decision-making, lack of professional development opportunities, and lacking the desire to teach when teaching was no longer emotionally or intellectually stimulating (Fimian & Fastenau, 1990).

Studies such as the one conducted by Skaalvik and Skaalvik (2015) indicated teaching as a whole was stressful as reported by their results from a 30-teacher participant study, which indicated workload and time pressure as particularly stressing for the majority of teachers (n = 30). Adapting teaching to meet the needs of the students caused 24 of the 30 teacher participants to experience high levels of stress. The misbehavior or discipline problems of students were a source of stress for 25 of the respondents. The lack of compatibility between the school's values and beliefs and their own personal beliefs and goals caused stress in 17 of the teachers. Working as team had its advantages, but for 16 participants it caused stress, especially when they were unable to choose their teammates. Lastly, the critical and negative view of the teaching profession reported by the media caused 16 of the respondents to feel intense levels of stress. In conclusion, while teaching as a whole has been reported as a stressful profession, the level of stress was individual to each person (Skaalvik, & Skaalvik, 2015).

Manifestations of Teacher Work-related Stress

As a result of the stress teachers face, visible manifestations of stress were often exhibited. Manifestations in general were defined as the display or disclosure of characteristic

signs or symptoms of an illness (stress) according to <http://medical-dictionary.thefreedictionary.com.manifestation>.

In a time when educators were experiencing educational reform and high-stake testing tied to teacher accountability, Sorenson (2007) surmised teachers exhibited decreased productivity at work, adverse health issues, higher rates of absenteeism, and were leaving the profession (Sorenson, 2007). Accountability and policy initiatives had been factors of teacher work-related stress since the National Commission on Excellence in Education (1983) published a report on the poor academic performance of school children in America (Dworkin, 2001). In 1984, acting in response to the 1983 report, the United States Secretary of Education sought "...to introduce uniformity and conformity through standardized curricula, rigorous requirement for student performance, promotion and graduation, and teacher evaluation" (Smylie & Denny, 1990, p. 235). The first reform, in 1987, was legislated standardization and competency testing. The 1987 reform was considered a complete failure thus, a second reform of decentralization and site-based decision-making came about in 1991. This reform failed as well, as the reform did not increase student achievement. A third reform of high-stakes testing was introduced in 1998 (Dworkin, 2001). High-stakes testing included standardized testing and state-mandated testing, created by each state as policy initiatives for the purpose of accountability (Gonzalez, Peters, Orange, & Grigsby, 2017). Berryhill, Linney, and Fromewick (2009) reported the stress teachers felt during high-stakes testing may have resulted from the limited time to prepare for the testing. Of particular interest, teachers experienced more anxiety towards high-stakes testing than their students (Mulvenon, Stegman, & Ritter, 2005). Throughout the three waves of school reform, Dworkin (2001) surmised teacher morale was often adversely affected, resulting in a high

incidence of burnout. Those teachers who decreased their stress and avoided burnout, did so by no longer caring about the reforms (Dworkin, 2001).

In a study conducted by Antoniou et al. (2013), results indicated primary teachers experienced greater levels of stress due to their working conditions and lack of support, than did secondary teachers. Furthermore females, as opposed to males, experienced feelings of less personal accomplishment and higher levels of stress as compared to their male counterparts (Antoniou, Polychroni, & Vlachakis, 2006). In particular, emotional exhaustion was reported more by women than men (Antoniou et al., 2006; Maslach, Jackson, & Letier, 1996). In a study by Stormont and Young-Walker (2017), early childhood teachers were found to be more vulnerable to stress due to the challenging behaviors and varying social-developmental levels of the children they worked with. In fact, the study revealed many teachers of young children had not been formally educated in the stages of social and emotional development and those with a college degree may not have had majors that represented the needs of early childhood education (Stormont & Young-Walker, 2017).

Research by Skaalvik and Skaalvik (2011) revealed a relationship between stress and attrition to teachers' working conditions. For instance, excessive workload was found to predict emotional exhaustion, motivation to leave the teaching profession, and teacher attrition (Skaalvik & Skaalvik, 2011). Other research by Blasé, Blasé, and Du (2008) reported principal mistreatment led teachers to experience serious psychological/emotional, physical/physiological, and work-related stressors. These stressors impacted their work and resulting in 76.7% of the 72 teacher participants planning to leave their teaching position due to the harm caused by their principal's mistreatment (Blasé et al., 2008).

Teacher manifestations of stress, characterized as either physical or emotional manifestations, were measured by the Fimian Teacher Stress Inventory (TSI) and administered by Fimian and Fastenau (1990).

Physical manifestations of teacher work-related stress. Physical manifestations, generally characterized by some degree of physical exhaustion or a general feeling of being tired and rundown (Evers, Gerrichhanzen, & Tomic, 2000; Noushad, 2008), included fatigue manifestations, cardiovascular manifestations, gastronomical manifestations, behavioral manifestations (Fimian & Fastenau, 1990). Fatigue manifested in a range of stress-related signs; such as headaches, sleeping more than normal or having insomnia, procrastinating, lacking energy to the point of experiencing physical weakness, fatigued over a short amount of time, physical exhaustion, and even physical limitations. Stress also affected the cardiovascular system causing heart pounding or racing, causing a sensation of increased blood pressure, and rapid breathing, all of which contributed to heart problems such as hypertension, heart attack, or stroke. The gastrointestinal system, which encompasses the esophagus, the stomach, and the bowels, caused people to either eat more or less food than normal and increased their use of alcohol or tobacco, due to the stress they faced, which led to heartburn and acid reflux (Evers et al., 2000; Fimian & Fastenau, 1990; Noushad, 2008). According to the APA publication, *Stress Effects on the Body*, chronic stress led to ulcers or severe stomach discomfort and affected digestion causing diarrhea or constipation (APA, 2017a). Behavioral manifestations were described as unsuitable approaches teachers chose to cope with work-related stress and many times the coping mechanisms were unhealthy and only resulted in short term fixes. These manifestations included the use of over-the-counter and prescription drugs, increases use of alcohol, and absenteeism from work.

Elkin (1999) stated 75% to 90% of all doctor visits, by teachers, were for medical issues related to work-related stress due to physiological changes that were typically associated with work stress (Elkin, as cited in Sorenson, 2007). Researchers reported a moderate amount of stress put workers at risk for hypertension, cardiovascular disease, and even diabetes (Melamed, Shirom, Toker, & Shapira, 2006). Kirsta (1987) and Nathan et al. (1989) reported warning signs of stress consisted of frequent illness, irritability, nail-biting, increased use of alcohol, hunger for sweets, fried and/or fast foods, rapid pulse, high cholesterol, and chest pains (Kirsta & Nathan et. al., as cited in Sorenson, 2007).

While teachers with high levels of job stress gained fulfillment from work the level of satisfaction was suppressed by stress from low autonomy, the level of mental struggle with students and colleagues, or doubt in their job roles (Greenglass & Burke, 2003), due to physiological changes usually associated with stress (Greenglass & Burke, as cited in McDonald et al., 2003). According to the 2017 American Psychological Association article titled *Stress Effects on the Body*, different body systems suffered when stress was present. Mentioned in this article were the musculoskeletal system, the respiratory system, the endocrine system, and both the male and female reproductive systems. The musculoskeletal system was affected when muscles tensed, a common response to stress. Over time, chronic stress forced the muscles to be in constant state of guardedness and often tension or migraine headaches resulted. The respiratory system affected an individuals' ability to breathe, and while normally breathing harder was not an issue, stress greatly affected individuals who suffered from asthma or lung issues. Rapid breathing, often associated with stress, led a person to hyperventilate inducing a panic attack. The endocrine system, made up of the adrenal glands, produced cortisol and epinephrine. These two chemicals aided in situations where flight or fight responses were needed

and also caused the liver to produce glucose, thus affecting people with diabetes. Chronic stress on the male reproductive system affected the production of testosterone, sperm count, and in extreme cases erectile dysfunction or impotence. Chronic stress on the female reproductive system caused painful, irregular or nonexistent menstrual cycles, and once a female approached menopause, the hormone levels varied. These rapid changes, for females, were often connected to anxiety, mood swings, and created a state of distress which manifested into physical symptoms, such as increased or more intense hot flashes and a diminished sex drive due to stress (APA, 2017b).

Emotional manifestations of teacher work-related stress. The last manifestations of stress as examined by Fimian and Fastenau (1990) were emotional manifestations (i.e., psychological manifestations) characterizing how teachers responded emotionally to stressful work situations, based on feelings. Feeling insecure, feeling vulnerable, the inability to cope, feeling depressed, and feeling anxious were all varying ways emotional manifestations were exhibited (Fimian & Fastenau 1990).

Information gathered from Research Services (2010) mentioned psychological (emotional) symptoms; such as feelings of anger, dissatisfaction, frustration, and anxiety were all normal symptoms found at any job (Noushad, 2008).

Chang (2009) examined emotions felt by teachers, such as anxiety, frustration, and guilt. Lazarus (2001) remarked anxiety resulted when one was confronted with “existential threats” (Lazarus, as cited in Chang, 2009, p. 207). In the case of teachers, anxiety was felt when they had very little control over situations causing a circumstance-based emotion (Chang, 2009). Another circumstanced-based emotion mentioned was frustration, the most frequent emotion felt by teachers (Chang, 2009), caused by variables outside the classroom such as administrative

work or conflicts with school administration about expectations (Golby, 1996; Hargreaves, 2004; Zembylas, 2003). Guilt, a self-caused emotion, is common in teachers who feel they have a moral responsibility to their students (Hargreaves and Tuckers, 1991; van Veen, Slegers, & van de Ven, 2005; Zembylas, 2003). Hargreaves (1998) noted teaching requires an intense level of emotional work and feeling worried, guilty, powerless, fearful, vulnerable, and disappointed are all emotions felt by teachers and can change moment by moment, day by day, etc. (Hargreaves, 1998). Teachers who experienced high levels of stress tended to have a lower tolerance for classroom disruptions and withdrew from social interactions with students and colleagues (Leithwood et al., as cited in Research Services; Zhang & Sapp, 2008).

Teachers who experienced negative emotions on a continual basis were thought to be in a “burnout cycle” (Leithwood et al. as cited in Research Services ; Zhang & Sapp, 2008).

Implications of Teacher Work-related Stress

Teacher Burnout

Much like the Job Demands/Control (JDC) model used by many occupations, the Job Demands-Resources (JD-R) model was used in the teaching profession (Demerouti et al., 2001). Hakanen et al. (2006) found burnout was predicted by teachers’ perceptions of job demands and the absence of job resources. Variables in both job demands and job resources included physical and/or psychological (i.e., cognitive and emotional) effort, social (i.e. culture of the school, support of administration and colleagues), or organizational aspects (i.e., salary and professional development opportunities, job security) (Bakker et al., 2004, p. 86).

Chang (2009) reported job demands, such as work environment (i.e., behaviors of students, workload) (Chang, 2009; Cheek, Bradley, Parr, & Lan, 2003; Hakanen et al., 2006), were the leading precursor to teacher burnout. Some research indicated teacher burnout was

more likely to occur within school environments characterized by low levels of principal support (Bivona, 2002; Haberman, 2004; Howard & Johnson, 2004; Taylor, Shepard, Kinner, & Rosenthal, 2002). Researchers, Hakanen et al. (2006) and Cheek et al. (2003), stated at any given time, between five and thirty percent of teachers showed clear symptoms of burnout and often was predicted by their perceptions of their working environment.

Researchers, Noushad (2008), Zhang and Sapp (2008), and Evers et. al. (2004) stated that individuals who experienced burnout felt meaningless, helpless, depressed, and resentful. Most burnout victims no longer found their jobs interesting or enjoyable and did not care about doing a good job. Teachers who were burned out often distanced themselves from students emotionally and physically, felt less sympathetic toward students, taught class less enthusiastically and creatively, and performed tasks by rote. Those experiencing burnout symptoms usually dreaded going to work in the morning (Evers et al., 2004; Noushad, 2008; Zhang & Sapp, 2008). Farber (1991, p. 313) stated “teacher stress and burnout have affected and will continue to affect the lives of teachers and their families, and all of society” (Farber, as cited in Friedman & Farber, 1992).

Researchers Scott (2010) and Hutman, Jaffe, Segal, Kemp, & Dumpke (2005) found stressors leading to burnout were attributed to situations where employees felt overworked, unappreciated for the work they did, confused about expectations and job priorities, concerned about their job security, overcommitted, and resentful about duties for which they were not compensated (Hutman et al., 2005; Scott, 2010).

As a profession, teaching is increasingly becoming more stressful due to growing responsibilities and overall demands of the job (Demjaha et al., 2015); causing teachers to leave the profession resulting in a national epidemic of teacher departures (McCarthy et al., 2009).

Mrozek (2005) reported one in three teachers stated teaching to be so stressful they left the teaching profession creating the highest annual turnover rate of 15.7% compared to other professions with an average turnover rate of 11.7% (Mrozek, as cited in Demjaha et al., 2015).

Burnout does not have to be a permanent condition and can be dissipated by changes and support in the working environment and individuals developing coping skills (Dworkin, 2001; Leithwood et al., as cited in Research Services; Noushad, 2008).

Teachers Leaving the Profession

Teachers who left the profession, due to stress, caused unintended consequences for school districts. The loss of trained staff created a substantial loss of skilled and experienced teachers (Howard & Johnson, 2004), which school districts had to replace (Sinclair & Ryan, 1987). Moreover, teachers who stayed but did not deal with their stress were prone to be more stressed and less effective in areas such as lesson planning, disciplining and motivating students, and working with parents (Sinclair & Ryan, 1987).

Many researchers have reported that within the first 5 years of teaching (2002-2007), one third to one half of teachers left their professional career (Hanushek, 2007; Ingersoll & Smith, 2003; Minarik et al., 2003).

The 2004-2005 “Teacher Follow-up Survey” from the National Center for Education Statistics surveyed three million teachers and 36% (10,000) left the teaching profession due to weak administration (Fisher, 2011) and lack of administrative support (Blasé et al., 2008). Many researchers have suggested common practices to combat stressors and retain teachers: mentoring for new teachers, improved professional development for all teachers, and peer teacher collaboration; all of which seemed viable options for school districts and administrators to

consider in the reduction of or halting teachers from leaving the profession (Blasé et al., as cited in Fisher, 2011; Lambert et al., as cited in McCarthy et al., 2009).

Coping with Work-related Stress

The 2013 national survey by the APA's Center for Organizational Excellence reported more than one-third of working Americans experienced work stress, but only 36% of Americans stated their work place provided resources that were sufficient to manage their stress and 51% stated they felt valued at work (APA, 2013).

The ways in which people act when dealing with stress is termed "ways of coping" and problem-solving and support-seeking were two examples (Skinner & Beers, 2016). The APA's (2017a) Psychology Center published an article *Coping with Stress at Work*, which listed problem-solving and support-seeking steps to manage one's overall stress. The majority of the steps were problem-solving strategies such as: 1) journaling stressors to find patterns of stressors and how those stressors were dealt with; 2) develop healthy responses to stress such as exercise, making time for hobbies or vacations, limiting caffeine and screen time at night and getting enough rest, rather than quick fixes such as drinking alcohol and eating fast food; 3) establish work-life boundaries to reduce work-life conflicts and the stress of ongoing communication 24 hours a day; and (4) learning relaxation techniques such as meditation, deep breathing, and mindfulness. The APA (2017a) publication also mentioned support systems provided by employers through the Employee Assistance Program (EAP), and according to the Society for Human Resource Management (2014), was a work-based intervention program which identified and assisted employees in resolving personal problems affecting the employee's performance. Counseling and mental health referrals were two available resources and were usually paid 100% by the employer.

In general, people need to take preventive coping measures to avoid chronic stress and improve overall health. In the American Psychological Association (2017) article, *Stress won't Go Away? Maybe You are Suffering from Chronic Stress*, tips for those who experienced prolonged stress and wanted to make better behavior choices were given. Listed in the 2017 publication were:

- a) set limits by identifying which tasks were necessary and then scaling down or eliminating those tasks that were secondary;
- b) find a support system within one's friends or family which helped individuals feel they were not facing their challenges alone and could offer perspectives not initially contemplated;
- c) make one health-related commitment in order to strengthen one's health to regain the energy needed to face stressful challenges, some of APA's (2017c) examples included cutting back on caffeine or increasing physical activity as a way to increase the body's production of feel-good endorphins;
- d) understand that enhanced sleep quality reduced the chances of inadequate sleep and stress-induced insomnia (APA, 2017c). According to the APA's 2009 Stress in American survey, 47% of all adults stated they could not sleep due to stress; The APA's (2017c) publication *Stress won't Go Away? Maybe You are Suffering from Chronic Stress* recommended receiving an average of 7-8 hours of sleep each night and going to bed at the same time each night increased the quality of sleep for people who laid in bed and worried. Writing down their concerns in advance of going to bed was a way to quiet thoughts and rid the mind of issues until morning;

- e) strive for a positive outlook focused on looking at situations in a positive light and seeing problems as opportunities, thus minimalizing stress and making realistic expectations to manage stresses;
- f) seek additional help by seeing a licensed mental health professional, such as psychologists who are trained to help people manage stress and develop coping strategies to improve one's overall health, was suggested when one could not get through their normal routine without feeling overwhelmed or feeling hopeless (APA, 2017c).

Teacher's Coping with Work-related Stress

Skaalvik and Skaalvik (2015) findings, from a study conducted with 30 Norwegian teachers indicated teachers experienced many school-based causes of stress, explaining the elevated degree of physical and emotional exhaustion often faced by teachers. They also spoke of the need to reduce the challenges and stress teachers encounter. For example, Skaalvik and Skaalvik suggested teacher's insurmountable workload, such as paperwork and meetings needed to be considered and reduced (Skaalvik & Skaalvik, 2015).

Many differing strategies for managing stress emerged throughout the different studies found in literature. Admiraal, Korthagen, and Wubbels (2000) discussed two coping strategies: problem-oriented coping, used when the environmental conditions were deemed pliable; and emotional-oriented coping strategies employed when changing the environment was deemed unlikely. Problem-oriented coping was the process by which the problem was defined, alternatives to the problem were identified, and the alternatives were appraised in terms of the benefits and costs of the chosen alternative. Emotional-oriented coping was employed when people did not believe they could change the environmental conditions (Admiraal et al., 2000).

Problem-oriented coping, also termed active coping, was reported by teachers to be the most effective coping strategy (Litt & Turk, 1985).

Kyriacou (2001) viewed stress management from two perspectives, palliative action and direct action. Palliative actions were considered dysfunctional in the long run because the palliative actions, such as excessive drinking, smoking and avoidance behaviors did not eliminate the actual source of stress, only reduced the impact of stress. Direct action, on the other hand, involved taking specific actions to eliminate the source of stress. Kyriacou (2001) found eliminating stress was far more effective than simply lessening the source of stress. Examples included keeping feelings in check, seeking out a supportive colleague and/or principal, organizing time and prioritizing needs (Kyriacou, 2001). In fact, researchers cited good administration and management to be a huge factor in reducing stress, as both created a school culture of support (Dworkin, Saha, & Hill, 2003; Kyriacou, 2001). Supportive environments were also found to be related to teachers' motivation to stay in the profession (Weiss 1999).

Resiliency was identified as another way to help teachers cope with work-related stress. In a 2004 study, Australian teachers who taught in disadvantaged schools, were interviewed using a semi-structured process to investigate 'resilient' strategies teachers used to cope with daily stress. In this study, Howard and Johnson (2004), found the participating teachers, who identified as having a resilience perspective defined as "a strong belief in the ability to control what happens to them" (p. 409), helped the teachers cope with serious occupational stress.

The researchers then examined the protective factors and the processes the teachers applied when coping with stress. Protective factors and processes included having a strong support group (i.e., competent leadership team), pride in their achievements, and competence in areas of personal importance (Howard & Johnson, 2004). All of the teachers believed their

coping skills and strategies were either learned from trial and error or from mentors who were more experienced, but firmly believed those strategies were what made them resilient (Howard & Johnson, 2004). Howard and Johnson (2004) suggested protective factors could make a difference in the lives of the teachers and were easy to implement or could be easily learned. Some implications of their study included teachers being able to depersonalize in stressful situations, teachers being able to ensure their moral purpose when working in a challenging environment, schools and leadership teams open to learning how to organize and provide behavior management strategies to support teachers, celebrating and valuing achievements of staff, and teachers learning to be competent in key areas such as behavior management, program organization, lesson preparation, and effective management of resources (Howard & Johnson, 2004).

Teacher coping was a term used to describe how teachers actually reacted to and dealt with the challenges and problems they faced everyday (Parker & Martin, 2009). By implementing adequate preventive coping resources, teachers decreased the number of events they interpreted as stress threats, thus reducing or eliminating the stress response triggers (McCarthy, Lambert, & Brack, 1997).

Lazarus and Folkman's (1984) Stress and Coping model indicated the general level of stress felt by teachers depended on three factors: their personality, the intensity of the situation, and their perceived coping strategies. (Lazarus & Folkman, as cited in Antoniou et al., 2013). The stress and coping model (Lazarus & Folkman, 1984) affirmed once a teacher considered the intensity of the stressful encounter, he/she was faced with processing the stressful situation by primary appraisal. The researchers of the stress and coping model defined primary appraisal as how a person assessed the stressor of the particular situation. Next, the person formulated a

secondary consideration, their ability to cope with the situation. Both the intensity of the stressful situation and their perceived ability to cope with the stress situation relied on personal assessment and the degree of stress was dependent on the person and the stressful situation (Lazarus & Folkman, as cited in Antoniou et al., 2013).

According to a study conducted by Jepson and Forrest (2006), 95 people from the United Kingdom with Type A and Type B personalities participated in a “snowball” or “purposeful” sampling technique to examine how Type A personalities perceived work-related stress. Jepson and Forrest (2006) predicted perceived stress would be the strongest factor among Type A teachers and their research findings found a positive relationship between Type A personalities and perceived stress, consistent with previous research done by Ganster (as cited in Jepson & Forrest, 2006). Type A personalities, who displayed a noticeable level of physiological and emotional activity, were at a greater risk of experiencing increased levels of perceived work stress leading to burnout than those with Type B personalities, faced with equal occupational demands (Jepson & Forrest, 2006).

Austin, Shah, and Muncer (2005) described avoidance as a passive approach in which teachers avoided or denied the problem; an approach employed as a coping strategy, but failed and often times increased the level of stress and burnout. Omdahl and Fritz (2006) and Potter (2005) reported teachers suffering from burnout typically chose unhealthy responses such as drinking more alcohol or caffeine, adopting unhealthy eating habits, and using drugs such as sleeping pills, tranquilizers, and mood elevators (Omdahl & Fritz; & Potter, as cited in Research Services, 2010). However, teachers who employed active rational approaches, such as problem-solving and implementing strategies, tended to reduce their level of stress (Antoniou et al., 2013).

School districts' leaders can help teachers reduce their work-related stress by providing "appropriate job resources...which can help [teachers] fight stress and can boost performance" (Banerjee & Mehta, 2016, p. 18). As suggested by the American Psychological Association's Psychology Help Center (2018) tip sheet on *Managing Your Boss*, talking to a supervisor could be a tool to manage work stress, since a supervisor should have their employees' well-being in mind (APA, 2018). Teachers and supervisors need to work together to make their school a healthy, functioning organization.

"Characteristics of a healthy school include: good communication with staff; a strong sense of collegiality; management decisions based on consultation; consensus established on key values and standards; whole school policies in place; roles and expectations clearly defined; teachers receive positive feedback and praise; good level of resources and facilities to support teachers; support available to help solve problems; policies and procedures that are easy to follow; red tape and paperwork is minimized; additional duties are matched to teachers skills; building environment is pleasant to work in; senior management makes good use of forward planning; induction and career development advice is given; and counseling services are available to members of staff who are experiencing high levels of stress. (Kyriacou, 2001, pp. 31-32)

Lazarus and Folkman (1987) regarded coping as a process since change was required, whether it be over time or by situation (Beers, 2012; Lazarus & Folkman, 1987). Skinner and Beers (2016) examined how mindfulness "could influence the process of stress and coping for teachers" (p. 107).

To offset the stress associated with being an educator, mindfulness training as part of teacher's professional development, was one process administrators used to lowered distress levels of their teachers (Roeser, Skinner, Beer, & Jennings, 2012).

Mindfulness as a Specific Coping Strategy for Teachers

“Mindfulness is an elusive, yet central, aspect of the 2,500-year-old tradition of Buddhist psychology” (Siegel, Germer, & Olendzki, 2009). Mindfulness was said to begin “by bringing awareness to current experience-observing and attending to the changing field of thoughts, feelings, and sensations from moment to moment-by regulating the focus of attention, leading to a feeling of being very alert to what is occurring in the here-and-now” (Bishop et. al., 2004, p. 232). More simply stated, Kabat-Zinn (1994) suggested mindfulness as a moment to moment awareness that is cultivated by purposefully paying attention to the present experience, with a non-judgement attitude.

This “awareness” took place through the use of deep breathing and meditation and these deliberate practices were intended to reduce stress and increase the relaxation response (Greeson, 2009; Hofmann, Sawyer, Witt, & Oh, 2010; Hölzel et. al., 2011).

Mindfulness-based approaches have been recognized as effective means to begin and maintain overall health and well-being (Baer, 2003; Brown & Ryan, 2003; Williams, Kolar, Reger, & Pearson, 2001). The term health included both physical and mental health. “Physical health” included physical pain, physical impairments, and the physical component of quality of life. “Mental health” equated to the psychological well-being, depression, anxiety, sleep, and psychological components of the quality of life (Grossman, Neimann, Schmidt, & Walach, 2004, p. 37).

While many researchers have used the Mindfulness-Based Stress Reduction (MBSR) training (Kabat-Zinn, Gold, Khoury, Sharna, Rush, & Fournier, as cited in Flook, Goldberg, Pinger, Bonus, & Davidson (2013), the pilot study conducted by Flook, Goldberg, Pinger, Bonus, and Davidson (2013) utilized the Mindfulness-Based Stress reduction course (mMBSR), adapted specifically for teachers. In the fall of 2001 public elementary classroom teachers participated for eight weeks in the mMBSR study, randomly being assigned to either an intervention group or a wait-list control group. Mindfulness was assessed using a five faceted mindfulness (FFMQ) scale and observed the five aspect of mindfulness: observing, describing, acting with awareness, nonjudging, and non-reactivity. The results of the study suggested “mindfulness interventions adapted for educators boosted aspects of teachers’ mindfulness ...reducing psychological symptoms and burnout” (Flook et al., 2013, p. 9). The researchers summed up the study by stating “mindfulness-based practices offer promise as tool for enhancing teaching quality” (Flook et al., 2013, p. 11).

Roeser et. al. (2012) provided examples of other mindfulness-based programs which could be customized to meet the needs of the teachers and school districts including Cultivating Awareness and Resilience in Education (CARE for teachers), Stress Management and Relaxation Techniques (SMART-in-Education), Inner Resilience, Mindfulness, Courage, and Reflection for Educators, Mindful Schools, and Passageworks Soul of Education Courses for Teachers (Roeser et al., 2012). It was hypothesized by Roeser et. al., (2012) when teachers were able to safeguard and develop self-governing means through mindfulness training, often times teachers sustained more supportive relationships in the classroom, promoted a conducive climate with regards to classroom management, which led to greater student engagement and instruction (Roeser et al., 2012).

Mindfulness should reduce the maladaptive ways of coping such as helplessness, opposition and submission and should promote adaptive means of coping like problem-solving, information seeking, and self-reliance (Feldman, Hayes, Kumar, Greeson, & Laurenceau, 2007). If teachers found coping strategies, such as mindfulness, to reduce stress, physical and mental health problems, and even burnout (Skinner & Beers, 2016), perhaps teachers would avoid engaging in maladaptive coping strategies (i.e., alcohol) which served to provide “quick fixes”, but had long-term health effects (Lindquist & Cooper, 1999).

Summary

Chapter 2 identified general work-related stressors, implications and manifestations in theme one, teacher work-related stressors, implications (i.e., burnout and leaving the profession) and physical and emotional manifestations in theme two, and coping strategies in theme three. School districts, and the teachers themselves, need to consider how to minimize the work-related stress teachers experience while providing the necessary resources for teachers to be successful. Chapter 3 outlines the research questions for the study, detailed informative on participant selection, the human subject approval process, the survey instrument design and analysis, and the timeline of the study.

Chapter 3: Methodology

Introduction

The purpose of the quantitative study was to identify the most noticeable work-related stressors, the physical and emotional manifestations of work-related stress, and coping strategies used to reduce stress as reported by K-5 teachers in select northern Minnesota elementary schools. The study results could prove beneficial to school district administrators who provide professional development and support for teachers; teachers themselves could also find the study results insightful as they explore ways to reduce work-related stress; and to teacher preparation programs.

For several decades teaching has been a profession considered to be very stressful. However, in recent years, due to increased responsibilities, job demands, and limited job resources, teaching has become even more stressful and teachers now face work-related stress on a daily basis (Demjaha et al., 2015).

In 2007, it was reported that 33% to 50% of teachers left the profession within the first 5 years of their employment (Hanushek, 2007; Ingersoll, & Smith, 2003). While the percentage decreased by 2012, the U.S. National Center for Educational Statistics reported that 17% of teachers still leave the profession within 5 years (Ingersoll, 2012). There is a significant higher departure rate of teachers compared to any other profession. (Minarik et al., 2003). These findings reveal that there is a reason for teachers leaving the profession.

Research Questions

The following research questions were developed to guide the study:

1. What did kindergarten through fifth grade classroom teachers in select northern Minnesota schools report as the most noticeable stressors they experienced in their teaching positions?
2. What did kindergarten through fifth grade classroom teachers in select northern Minnesota schools identify as the emotional and physical manifestations of work-related stress they experienced?
3. What did kindergarten through fifth grade classroom teachers in northern Minnesota schools identify as strategies they utilized to cope with work-related stressors?

Participants

The study participants, kindergarten through fifth grade classroom teachers, were chosen through convenience sampling, which according to the statistics dictionary, is a non-probability sampling technique where subjects are selected due to their convenient accessibility and proximity to the researcher. The participant sample was obtained from select northern Minnesota schools within a 50-mile radius of Bemidji, Minnesota. Within the 50-mile radius, there are 17 public school districts and over 400 possible participants.

A letter of support and consent to participate (Appendix F) was sent to each superintendent of the 17 public-school districts within a 50-mile radius of Bemidji, Minnesota. Upon receipt of a signed letter of support and consent from the district superintendent, an email was sent to the principals of the schools within the approved district. The email (Appendix G) asked each principal to first read the attached signed letter of support and consent from their superintendent and then distribute the attached survey (Appendix I) and participant consent form to the kindergarten through fifth grade teachers in their school district. The kindergarten through

fifth grade teachers needed to sign the consent form (Appendix H) in order for their survey results to be included in the study.

To ensure participant confidentiality, the survey did not include any demographic questions beyond the years of teaching experience. In addition, the survey was managed by the St. Cloud Statistical Center to ensure participant responses were not able to be identified by specific individual, grade level or particular school, and the data will be destroyed following the final dissertation defense.

Human Subjects Approval—Institutional Review Board (IRB)

In an effort to ensure the rights and welfare of subjects participating in the study are adequately protected, the researcher took appropriate measures to comply with the Federal Policy for the Protection of Human Subjects (45 CFR 46). Approval of the study and survey instrument was obtained from the St. Cloud State University Institutional Review Board (Appendix E). The St. Cloud State University Statistical Center assisted in developing the web-based survey using their licensed SurveyMonkey, as well the staff ran the data, analyzed, and assembled the results.

The ethical implications of the research were strictly followed to protect the anonymity of the participants and their responses during the study and beyond. Participants who consented to participate in the study were informed of their option to decline or withdraw from the survey at any time (Appendix H). The risk of the participants in the study was minimal, and the researcher will maintain the security of the survey responses until the completion of the study, and then, the data destroyed.

Instrument for Data Collection and Analysis

The study utilized a quantitative methodology. Data were collected through the use of a closed-ended survey created from an existing inventory found in research. The original Teacher Stress Inventory (TSI), developed by Michael Fimian in 1984, was created for administration to public school teachers who worked with regular and special needs students. The TSI was first piloted and then employed with a broad sample of teachers in eight states. Fimian (1988) emphasized the TSI should be solely used for regular public-school teachers who teach regular or special education students in grades one through 12. TSI Total Stress Score norms were established for regular education teachers and special education teachers; therefore, the TSI can be administered to teachers from either group (Fimian, 1988). The original (TSI) was comprised of five different stress sources: time-management, work-related stress, professional distress, discipline and motivation, and professional investment; and five manifestations of stress: emotional, fatigue, cardiovascular, gastronomical, and behavior, for a total of 49 stress related items.

With regard to the reliability and validity of the original Teacher Stress Inventory, “the alpha reliability estimates for the TSI subscales and scale were examined using Cronbach’s (1951) coefficient alpha. The relationships among those factors were then investigated using Pearson product-moment correlational analyses” (Fimian, 1988).

In terms of addressing factorial validity, “all forty-nine items exceeded the 0.35 loading criterion and all but two exceeded 0.40” (Fimian & Fastenau, 1990, p. 152). With regards to the internal consistency reliability, “the alpha reliability was estimated for each derived TSI subscale and scale and all but one of the subscale alphas exceeded 0.70; the whole scale alpha was 0.93” (Fimian & Fastenau, 1990, p.154). Scale and subscale intercorrelations “among the derived

subscale and total scale scores indicated low to moderate positive correlations existing between and among the scales. The *rs* ranged from a low of 0.20 to a high of 0.62; almost 60% of the possible correlations exceeded 0.40. “All correlations were significant at or beyond the 0.001 probability level” (Fimian & Fastenau, 1990, p. 154).

The current TSI was modified to meet the parameters of the study. The inventory was shortened substantially, using only 18 of the original 49 questions to reduce the amount of time required to complete the survey and to focus on the key topics of work-related stressors and emotional and physical manifestations. The first 21 questions on the survey employed a 5-point Likert scale. The last survey question had study participants rank ten items from 1-10 with 1 = the strategy used most and 10 = the strategy used least to cope with work-related stress. The first section of eight questions related to work-related stressors and served to address the first research question: what did kindergarten through fifth grade classroom teachers report as the most noticeable stressors they experienced in their teaching positions? The subsequent 13 questions inquired about the physical and emotional manifestations of work-related stress and were linked to the second research question: what how did kindergarten through fifth grade teachers in select northern Minnesota schools identify as the emotional and physical manifestations of work-related stress they experienced. The next survey question addressed the study’s third research question: what did kindergarten through fifth grade teachers in northern Minnesota schools identify as strategies they utilized to cope with work-related stressors. This survey question was developed through the readings in the literature review. The final demographic question asked teachers to select the category that represented their years of teaching experience: 1-5 years, 6-10 years, 11-15 years, and 16+ years.

Permission for use of all or parts of the inventory was obtained from Michael Fimian (Appendix B).

A pilot study of the survey was undertaken to refine the design of the study, the study's questions, the response choices for both the closed-ended questions and ranked order question, and to ensure the survey was specific to the research questions. The survey was piloted with doctoral students in the Education Administration and Leadership program at St. Cloud State University to review the wording of the questions, the closed-ended response choices, and the overall layout of the survey. Suggestions and feedback were considered in refining the survey to meet the needs of the study. A pilot test serves as a trial run of the study, done for the sole purpose of testing the instrument and identifying any issues that need to be addressed before the actual study is conducted, according to the Association for Qualitative Research's glossary definition found at <http://www.aqr.org.uk.glossary/pilot-study>.

Once the survey was finalized, the consent of support form was emailed to select northern Minnesota K-5 school district superintendents to seek their permission to administer the survey to the kindergarten through fifth grade teachers in their school districts. Once permission was granted (Appendix F), principals were emailed the signed consent of support form with the survey attached to disseminate to their kindergarten through fifth grade teachers (Appendix I). The attachment included an invitation for the K-5 teachers to participate, the consent form to participate (Appendix H), and the 5-10-minute survey instrument (Appendix I).

The survey was administered, and data were collected through the St. Cloud State Statistical Center using Survey Monkey. This electronic format provided many valuable components to the researcher which included: the survey was completed online; it had the capability to be open for a set period of time, it allowed the researcher to observe the number of

responses; and it permitted reminders to be sent to study participants. The electronic survey was distributed for 4 weeks, dependent on the target rate of responses, with weekly reminders. Descriptive data analysis features with specific filters available were then considered at that time.

Research Design

The quantitative research study allowed the researcher to examine a larger number of subjects and simplify the findings to a broader population (Slavin, 2007), collected the data through the use of a closed-ended survey.

The survey included questions from the valid and reliable Teacher Stress Inventory created by Michael Fimian. The first eight questions on the survey inquired about work-related stressors and included a 1-5 Likert-scale in which 1 indicated not noticeable and 5 indicated extremely noticeable. The next thirteen questions inquired on the frequency of physical and emotional manifestations of work-related stress and included a 1-5 Likert-scale in which 1 indicated never and 5 indicated always. Question twenty-two requested teachers rank ten items from 1-10, with 1= the strategy used most and 10 = the strategy used least to cope with work-related stress. The twenty-third and final question was a demographic question that asked teachers to select the years of teaching that reflected their experience between 1-5 years, 6-10 years, 11-15 years, and 16+ years.

Treatment of Data

The *Teacher Stress and Coping Survey Monkey* survey results were analyzed by St. Cloud State University Statistical Consulting and Research Center using the Statistical Package for the Social Sciences (SPSS) Version 25.

The first six questions asked respondents to indicate on a five-point Likert scale the strength of stressors from (1) not noticeable to (5) extremely noticeable. The next 12 questions

inquired on the frequency of physical and emotional manifestations of work-related stress and included a 1-5 Likert-scale in which 1 indicated never and 5 indicated always. To determine each teacher's mean score, also termed as the subscale score, each subscale was scored separately by adding the teacher's responses and dividing by the sum of the number of items. The remaining subscales continued this process until one mean item score had been derived from each. To compute the Total Stress score of the three subscales, the mean item or subscales scores were totaled, and then that value was divided by 18, the total number of the TSI subscales. For test norms and interpretation, normative types of comparison were examined by comparing respondent scores with those generated by the norm group.

For question twenty-two, respondents ranked the ten items methods for coping with work-related stressors from 1-10 with 1= the strategy used most and 10=the strategy used least to cope with work-related stress.

Procedures and Timeline

The timeline and procedures for the research study are specified below. In October 2018 the dissertation proposal meeting was scheduled. Following successful completion of the preliminary examination (Appendix D), the application materials for the Institutional Review Board (IRB) were completed and submitted. The IRB training was previously completed in September of 2017.

Also, in October 2018 superintendents from Minnesota school districts located within a 50-mile radius from Bemidji, Minnesota were asked to sign a letter of support and consent authorizing distribution of the 23 question Teacher Stress Inventory survey to their kindergarten through fifth grade teachers. After IRB approval, the principals of the selected schools were asked to disseminate the survey, with the attached consent to participate form, to their K-5

teachers. The data were collected during November and December, 2018. The Statistical Consulting and Research Center at St. Cloud State University, in St. Cloud, Minnesota, analyzed the collected data using Survey Monkey in January, 2019.

Chapters 4 and 5 were completed from February-April of 2019. In May of 2019, the Final Dissertation Defense was scheduled. On May 24, 2019, the Final Dissertation Defense was conducted and application for graduation were completed.

Summary

Chapter 3 described the study methodology, including an introduction to the study, an overview of the study, the research design, population sample, human subject approval, instrument for data collection and analysis, research design, treatment of data, procedures and timeline and a brief summary. Chapter 4 reports the findings of the study. Quantitative data are discussed and described. Chapter 5 reports the major study conclusions, discussions, limitations, and recommendations.

Chapter 4: Results

Introduction

While teachers may find personal satisfaction in teaching, it can also result in stress, burnout, and leaving the profession (Hanushek, 2007; Ingersoll & Smith, 2003).

Studies such as McCarthy et al. (2009) found that teaching is a stressful career and can lead to some teachers suffering professional burnout. Additionally, Minarik et al. (2003) reported that there was a significantly higher departure rate of teachers compared to any other profession.

The U.S. National Center for Educational Statistics reported 17% of teachers left the profession within 5 years of having been employed (Ingersoll, 2012; Cox et al., 2007).

Critical to managing stress, such as reported in the teaching profession, is the use of coping strategies. Methods to cope with stress include mindfulness (Skinner & Beers, 2016) and in an APA's help center article *Stress won't Go Away? Maybe You are Suffering From Chronic Stress*, it was suggested that developing healthy responses, establishing boundaries, and getting support were also strategies to cope with work-related stress (APA, 2017c).

Purpose of the Study

The purpose of the quantitative study was to identify the most noticeable work-related stressors, the physical and emotional manifestations of work-related stress, and coping strategies used to reduce stress reported by K-5 teachers in select northern Minnesota elementary schools.

Research Questions

1. What did kindergarten through fifth grade classroom teachers in select northern Minnesota schools report as the most noticeable stressors they experienced in their teaching positions?

2. What did kindergarten through fifth grade classroom teachers in select northern Minnesota schools identify as the emotional and physical manifestations of work-related stress they experienced?
3. What did kindergarten through fifth grade classroom teachers in select northern Minnesota schools identify as strategies they utilized to cope with work-related stressors?

Research Design

The quantitative research study design allowed the researcher to contact a larger number of subjects (118) and to generalize the findings to a broader population (Slavin, 2007). Data were collected from 16 school districts in northern Minnesota through the use of a closed-ended survey. The study was presented to superintendents for their approval and, once obtained, individual principals in participating school districts distributed the survey link to K -5 elementary teachers in their respective schools. A total of 119 respondents completed survey questions 1-8 out of the 22 survey questions; and 118 respondents completed survey questions 9-21, which represented 13 of the 22 survey questions. Due to issues with the survey link, a range from 97-111 respondents completed the final survey question; 97 respondents ranked every survey question option, 111 respondents ranked some of the options, and 22 respondents did not answer the question.

The first eight survey questions asked respondents to indicate their perception of how noticeable work-related stressors were to them and included a 1-5 Likert-scale in which 1 indicated not noticeable and 5 indicated extremely noticeable. The next 13 survey questions asked respondents to indicate the frequency with which they experienced physical and emotional manifestations of work-related stress. These survey questions used a 1-5 Likert-scale in which 1

indicated never and 5 indicated always. Survey question 22 requested that survey respondents rank ten items from 1-10 with 1= the strategy used most and 10=the strategy used least to cope with work-related stress. The last survey question was a demographic question that asked teachers to select the range of years that best reflected their teaching experience. The categories were: 1-5 years, 6-10 years, 11-15 years, and 16+ years of experience.

The *Teacher Stress and Coping* survey results obtained from Survey Monkey were analyzed by St. Cloud State University Statistical Consulting and Research Center using the Statistical Package for the Social Sciences (SPSS) Version 25. Descriptive statistics were used to analyze the data and calculate means, standard deviation, and percentages for the first 21 survey questions. Survey question 22 employed a ranking scale from 1-10 with 1= the strategy used most and 10 = the strategy used least to cope with work-related stress; data were reported by frequencies and mean calculations.

Chapter 4 Organization

Chapter 4 results are presented in order of the study's three research questions. Tables are used to detail survey results; demographic information regarding years of respondents' teaching experience is also presented at the end of the chapter.

Research Question 1

What did kindergarten through fifth grade classroom teachers in select northern Minnesota schools report as the most noticeable stressors they experienced in their teaching positions?

Table 1 contains the data for Research Question 1 regarding respondents' perceived level of noticeable level of stress for each of the eight work-related stress factors using a 5-point Likert

scale. The Likert scale choices were: (1) not noticeable, (2) barely noticeable, (3) moderately noticeable, (4) very noticeable, (5) and extremely noticeable.

The data were reported in descending order by mean scores.

Table 1

Perceived Level of Noticeable Stress for Work-related Stressors (N= 119)

Work-Related Stressors	Frequencies						M	SD
	Percentages							
	NN	BN	MN	VN	EN	Total		
There is too much work to do.	2	8	32	48	29	119	3.79	0.95
	1.7	6.7	26.9	40.3	24.4	100.0		
Students behaviors negatively impact my ability to perform my job.	7	13	26	33	40	119	3.72	1.21
	5.9	10.9	21.8	27.7	33.6	100.0		
There is little time to prepare for my lessons/responsibilities	4	10	34	50	21	119	3.62	0.98
	3.4	8.4	28.6	42.0	17.6	100.0		
My personal priorities are being short-changed due to time demands at work.	7	15	35	32	30	119	3.53	1.17
	5.9	12.6	29.4	26.9	25.2	100.0		
There is too much paperwork in my job.	10	25	40	21	23	119	3.18	1.21
	8.4	21.0	33.6	17.6	19.3	100.0		
The pace of the school day is too fast.	11	20	40	34	14	119	3.17	1.13
	9.2	16.8	33.6	28.6	11.8	100.0		
There is a general lack of support for my job responsibilities.	14	34	27	31	13	119	2.96	1.21
	11.8	28.6	22.7	26.1	10.9	100.0		
My class is too big.	26	21	32	28	12	119	2.82	1.29
	21.8	17.6	26.9	23.5	10.1	100.0		

Note: Likert-scaled responses from survey questions 1 through 8, (NN) not noticeable =1, (BN) barely noticeable = 2, (MN) moderately noticeable = 3, (VN) very noticeable = 4, and (EN) extremely noticeable = 5.

Table 1 data reveal that the largest number of participants' responses in the category of extremely noticeable work-related stressors was for behaviors negatively impact my ability to perform my job 33.6% (n = 40). The remaining seven extremely noticeable work-related stressors identified by study respondents were between 10.1% (n = 12) for my class is too big and 25.2% (n = 30) for my personal priorities are being short-changed due to time demands at work.

For the category of very noticeable work-related stressors, the largest number of responses reported were for there is little time to prepare for my lessons/responsibilities 42.0% (n = 50), followed by there is too much work to do 40.3% (n = 48), and the pace of the school day is too fast 28.6% (n = 34).

The remaining five very noticeable work-related stressors identified by study participants were between 17.6% (n = 21) there is too much paperwork in my job and 27.7% (n = 31) for student behaviors negatively impact my ability to perform my job.

In the category of moderately noticeable work-related stressors reported by study respondents there were 33.6% (n = 40) for two of the work-related stressors, the pace of the school day is too fast and there is too much paperwork in my job, and 29.4% (n = 35) for my personal priorities are being short-changed due to time demands at work. There is little time to prepare for my lessons/responsibilities received was reported by 28.6% (n = 34) of study respondents.

The remaining four work-related stressors in the moderately noticeable category reported by study respondents were between 21.8% (n = 26) for student behaviors negatively impact my ability to perform my job and 26.9% (n = 32) for the two work-related stressors there is too much work to do and my class is too big.

For the category of barely noticeable, the largest number of responses was for the work-related stressor, there is a general lack of support for my job responsibilities, with 28.6% (n = 34) of respondents who selected that level of stress. The remaining seven work-related stressors in the category of barely noticeable were reported by study respondents between 6.7% (n = 8) for there is too much work to do, and 21.0 % (n = 25) there is too much paperwork in my job.

The largest number of responses in the category of non-noticeable work-related stressors was for my class is too big, 21.8% (n = 26). The remaining seven work-related stressors in the category of non-noticeable were reported by study respondents between 1.7% (n = 2) for there is too much work to do and 11.8% (n = 14), there is a general lack of support for my job responsibilities.

Table 1 data also reveal that the four highest mean scores of work-related stressors reported by study respondents were: there is too much work to do (M = 3.79), student behaviors negatively impact my ability to perform my job (M = 3.72), there is little time to prepare for my lessons/responsibilities (M = 3.62), and my personal priorities are being short-changed due to time demands at work (M = 3.53).

A general lack of support for my job responsibilities (M = 2.96) and my class is too big (M= 2.82) received the lowest mean scores indicating a lower reported rating of stress than the other six work-related stressors.

The researcher considered mean scores at or above 3.5 to be most noticeable work-related stressors experienced by study respondents and mean scores at or below 3.0 to be the least noticeable work-related stressors based on a discernable differentiation between the mean scores.

Table 1 data also revealed that the standard deviations (SD) data points, which measured the spread of responses within each of the eight-related stressors, were between 0.95 and 1.29, indicating that most of the responses were very close to the average.

In summary, the work-related stressor identified by respondents as extremely noticeable was for behaviors negatively impact my ability to perform my job. Respondents identified very noticeable and moderately noticeable work-related stressors as: there is little time to prepare for my lessons/responsibilities; there is too much work to do; the pace of the school day is too fast; and there is too much paperwork in my job.

Research Question 2

What did kindergarten through fifth grade classroom teachers in select northern Minnesota schools identify as the emotional and physical manifestations of work-related stress they experienced?

Table 2 offers data from 118 respondents who reported their perceived emotional and physical manifestations of work-related stress using a 5-point Likert scale. The Likert scale choices were as follows (1) never, (2) rarely, (3) sometimes, (4) often, and (5) always.

The data were reported in descending order by mean scores.

Table 2

Reported Emotional and Physical Manifestations of Work-related Stress (N = 118)

Responses to Stress	Frequencies Percentages						M	SD
	N	R	S	O	A	Total		
I respond to stress by feeling anxious.	6 5.1	13 11.0	32 27.1	46 39.0	21 17.8	118 100.0	3.53	1.07
I respond to stress with physical exhaustion.	11 9.3	21 17.8	32 27.1	42 35.6	12 10.2	118 100.0	3.19	1.13
There are days when I feel tired before I arrive at work.	6 5.1	23 19.5	38 32.2	44 37.3	7 5.9	118 100.0	3.19	0.99
I respond to stress by becoming fatigued in a very short time.	13 11.0	21 17.8	39 33.1	36 30.5	9 7.6	118 100.0	3.06	1.11
I respond to stress by procrastinating.	12 10.2	31 26.3	45 38.1	22 18.6	8 6.8	118 100.0	2.86	1.06
I respond to stress by feeling insecure.	15 12.7	24 20.3	48 40.7	28 23.7	3 2.5	118 100.0	2.83	1.02
I respond to stress by feeling angry	18 15.3	29 24.6	43 36.3	26 22.0	2 1.7	118 100.0	2.70	1.03
I respond to stress by feeling vulnerable.	21 17.8	26 22.0	45 38.1	23 19.5	3 2.5	118 100.0	2.67	1.06
I respond to stress by feeling depressed.	25 21.2	28 23.7	40 33.9	19 16.1	6 5.1	118 100.0	2.60	1.14
I respond to stress by experiencing more illnesses (e.g. colds).	18 15.3	41 34.7	37 31.4	17 14.4	5 4.2	118 100.0	2.58	1.05
I respond to stress by feeling unable to cope.	20 16.9	33 28.0	45 38.1	17 14.4	3 2.5	118 100.0	2.58	1.02
I respond to stress by sleeping more than usual.	26 22.0	29 24.60	39 33.1	23 19.5	1 0.8	118 100.0	2.53	1.07
I respond to stress with physical weakness.	30 25.4	50 42.4	24 20.3	13 11.0	1 0.8	118 100.0	2.19	1.05

Note: Likert-scaled responses from survey questions 9 through 21, (N) never = 1, (R) rarely = 2, (S) sometimes = 3, (O) often = 4, and (A) always = 5. Also, questions 9-14 are examples of emotional manifestations while questions 15-21 are physical manifestations.

Table 2 data indicate the percentages and frequencies of study respondents who selected often and always as their responses to emotional and physical manifestations of stress. The largest percentage of responses 56.8% (n = 67), were for feeling anxious which would be considered an emotional manifestation of stress. There were 45.8% (n = 54) of respondents who

reported they responded to stress with physical exhaustion, and 43.2% (n = 51) responded there are days when I feel tired before I arrive at work, and 38.1% (n = 45) reported they responded to stress by becoming fatigued in a very short time, all three of which would be considered physical manifestations of stress. Physical exhaustion and there are days when I feel tired before I arrive at work were reported by 89.0% (n = 105) of the respondents.

Table 2 data reveal percentage and frequencies by study respondents who selected never or rarely for responses to stress: 67.8% (n = 80) responded to stress with physical weakness; 50.0% (n = 59) responded to stress by experiencing more illnesses (e.g., colds); 46.6% (n = 55) responded to stress by sleeping more than usual; 44.9% (n = 53) identified that they responded to stress by feeling depressed as did 44.9% (n = 53) by feeling unable to cope. The first three reported responses to the emotional and physical manifestations of stress would be considered physical manifestations (physical weakness, more illnesses, and sleeping more than usual) and the latter two would be considered emotional manifestations of stress (feeling depressed and feeling unable to cope).

Table 2 data also illustrate that mean scores for responses to emotional and physical manifestations of work-related stress as reported by study participants were highest for those who felt anxious (M = 3.53) followed by feeling tired before arriving to work (M = 3.19), physical exhaustion (M = 3.19), and becoming fatigued over a short period of time (M = 3.06).

The researcher considered mean scores at or above 3.0 as indicators of higher emotional and physical manifestations than mean scores below 3.0 based on a discernable differentiation between the mean scores.

The lowest mean score, 2.19, was for the selection, I respond to stress with physical weakness.

In summary, 56.8% of the manifestations of stress identified by respondents were considered to be emotional manifestations (feeling anxious); the physical manifestations of stress (physical exhaustion, days when I feel tired before I arrive at work, and becoming fatigued in a very short period of time) were reported by 89.0% of respondents.

Table 2 data show the contrast between emotional and physical manifestations of stress. Questions 9-14 were considered emotional manifestations, while questions 15-21 were considered physical manifestations of stress.

Table 2 data reveal that for the questions considered emotional manifestations of stress, 76.3% (n = 43) of study respondents reported they responded to stress by feeling angry. For the remaining eight emotional manifestations of stress, the range of responses was a low of 27.1% (n = 31) for I respond to stress by feeling anxious, to a high of 40.7% (n = 48) for I respond to stress by feeling insecure.

The data revealed in Table 2 regarding physical manifestations to stress have already been reported in previous information for Research Question 2, but to summarize, there were 45.8% (n = 54) of respondents who reported they responded to stress with physical exhaustion, and 43.2% (n = 51) responded there are days when I feel tired before I arrive at work, and 38.1% (n = 45) reported they responded to stress by becoming fatigued in a very short time, all three of which would be considered physical manifestations of stress.

Table 2 data reveal that the standard deviations (SD), which measured the spread of responses within each of the work-related stressors, were between 1.00 and 1.14 standard deviations from the mean indicating that most of the responses were very close to average.

Research Question 3

What did kindergarten through fifth grade classroom teachers in northern Minnesota schools identify as strategies they utilized to cope with work-related stressors?

Tables 3 and 4 data reveal how the study respondents ranked their use of coping strategies using a scale of 1-10 with 1= the strategy used most and 10 = the strategy used least to cope with work-related stress. Table 3 presents an overview of the data findings for each of the 10 coping strategies while Table 4 presents the frequencies and percentage of study respondents' ranking of their selection as 1, the strategy they reported they used most.

It was important to note that there were 97 respondents who ranked every coping strategy with a number ranking from 1 to 10, 111 respondents assigned a number from 1-10 to some of the coping strategies, and 22 respondents did not answer the question.

Table 3

Reported Strategies Utilized to Cope with Work-related Stress

Coping Strategy	Total # of Respondents	Frequency	Percent Based on Respondents Answering the Question
Counseling	98	30	30.6
Personal and Family Relationships	110	32	29.1
Medication	106	18	18.6
Food	111	20	18.0
Entertainment (movies, plays, sporting events, hobbies, etc.)	100	18	18.0
Alcohol	102	24	17.6
Vacation	111	19	17.1
Mediation/Mindfulness	97	23	16.9
Physical Activity (ex. running, yoga)	105	19	14.0
Administrator/Collegial Support	108	18	13.2

Note: The last question asks to rank ten items regarding methods for coping with work-related stressors from 1-10 with 1= the strategy used most and 10 = the strategy used least to cope with work-related stress.

Table 3 data reveal percentages and frequencies of the total number of study respondents who reported strategies utilized to cope with work-related stress. Counseling was identified as the coping strategy used most for work-related stress, 30 of 98 study respondents or 30.6% followed closely by 32 of 110 of study respondents or 29.1%, who chose personal and family relationships. For the remaining coping strategies, the percentages of respondents who chose to answer the question were all under 18.6%.

In summary, personal and family relationships and counseling are reported as the coping strategies utilized more often than the other eight strategies listed as options to cope with work-related stress.

Table 4 data represents the frequencies and percentages of respondents who assigned the rank of 1 in each category as the strategy they used most to cope with work-related stress.

Table 4

Reported Number One Coping Strategy Utilized for Work-related Stress

Coping Strategy used most by Category	Total # of Respondents	Frequency of #1 Ranking	Percent
Personal and Family Relationships	110	32	29.1
Physical Activity	105	18	17.1
Entertainment	100	16	16.0
Medication	106	12	11.3
Food	111	10	9.0
Counseling	98	6	6.1
Administrator/Collegial Support	108	5	4.6
Vacation	111	5	4.5
Meditation/Mindfulness	97	4	4.1
Alcohol	102	1	1.0

It was important to note that there were 97 respondents who ranked every coping strategy with a number ranking from 1 to 10, 111 respondents assigned a number from 1-10 to some of the coping strategies, and 22 respondents did not answer the question.

Table 4 data reveal that 29.1% or 32 of 110 of study respondents selected personal and family relationships as their number one way to cope with work-related stressors. This was followed by physical activity 17.1% or 18 of 105 study respondents, entertainment with 16.0% or 16 of 100 respondents, medication 11.3% or 12 of study respondents, and food 9.0% or 10 of 111 study respondents.

The coping strategies which received the lowest number of responses as the number one coping strategy were: counseling with 6.1% or 6 of 98 respondents; administrator/collegial support with 4.6% or 5 of 108 study respondents; vacation with 4.5% or 5 of 111 respondents; meditation/mindfulness with 4.1% or 4 of 97 of study respondents; and alcohol with only one person of 102 who selected this as the number one coping strategy.

In summary, Table 4 data reveal that study respondents were varied in the coping strategies used to cope with work-related stress.

Table 5 data reveal the results of the demographic question that asked study respondents to select the range of years that best reflected their years of teaching experience. The categories were: 1-5 years, 6-10 years, 11-15 years, and 16+ years.

Table 5

Range of Years of Teaching Experience (N = 112)

Years of Teaching Experience	Frequency	Percent
1-5 years of teaching experience	15	13.4
6-10 years of teaching experience	20	17.9
11-15 years of teaching experience	21	18.8
16+ years of teaching experience	56	50.0
Total	112	100.0

Table 5 data revealed that 18.8% (n = 21) of the teachers reported 11-15 years of teaching experience and 50.0% (n = 56) of the teacher respondents reported 16+ years of teaching experience. In all, 68.6% (n = 77) of the respondents who responded to the request to complete the survey and to identify work-related stressors, how they respond to both the emotional and physical manifestations of stress, and how they rank the coping strategies had 11 or more years of teaching experience. There were 31.3% (n = 35) of survey respondents who reported 1-10 years of teaching experience. In summary, over half of the survey respondents reported having 11 or more year of teaching experience.

In summarizing Chapter 4, kindergarten through fifth grade teachers in select northern Minnesota school reported the most noticeable work-related stressors as: there is too much work to do (M = 3.79), student behaviors negatively impact my ability to perform my job (M = 3.72), there is little time to prepare for my lessons/responsibilities (M = 3.62), and my personal priorities are being short-changed due to time demands at work (M = 3.53).

The most noticeable work-related stressors reported as experienced by kindergarten through fifth grade classroom teacher respondents were highest for those who felt anxious

($M = 3.53$) which is considered an emotional manifestation to stress. Physical manifestations of stress reported by the study respondents included: feeling tired before arriving to work ($M = 3.19$), physical exhaustion ($M = 3.19$), and becoming fatigued over a short period of time ($M = 3.06$).

The select northern Minnesota kindergarten through fifth grade classroom teachers identified personal and family relationships 29.1% ($n = 32$), physical activity 17.1% ($n = 18$) and entertainment 16.0% ($n = 16$) as the coping strategies most used to cope with work-related stressors.

Overall, the majority of those who responded to the survey reported having 11 or more years of teaching experience. Of those, 18.6% teachers reported 11-15 years of teaching experience and 50% reported having 16+ years of teaching experience.

Summary

Chapter 4 reported the findings of the study. Quantitative data were described and reported. Chapter 5 presents conclusions and discussion from the study findings. The chapter also includes study limitations, recommendations for future research and practice and a summary.

Chapter 5: Conclusions, Discussion, Limitations, Recommendations for Future Study and Practice

Introduction

Kyriacou (2001) defined teacher stress as the negative emotions of the job and the related pressures and experiences teachers faced, and their inability to cope with those pressures (Kyriacou, 2001). Jennett et al. (2003) stated stress was inevitable at work, and although the reasons differed, all teachers experienced work-related stress. Simply stated, the work-related stress teachers experienced resulted from negative emotions produced by their work (Hakanen et al., 2006; Kyriacou, 2001).

The degree of job stress is different for each person and is dependent on certain particulars of the job, the existence of work stressors out of the person's control, the amount of work and home support, and even the manner in which a person coped with job stress (Johnson et al., 2005).

How well a teacher performs in the classroom has a tremendous impact on the success of their students; however, work-related stress can negatively affect a teacher's performance (Sinclair & Ryan, 1987). Therefore, a study of teachers' awareness of work-related stressors, including the physical and emotional manifestations of stress, and the coping strategies used to reduce work-related stress was needed. There is a lack of research regarding elementary teachers' work-related stresses in schools located in northern Minnesota. The study could provide information and insight for teachers and administrators in that region especially with regard to teacher professional development focused on reducing work-related stress and effective coping strategies.

Research design. The purpose of the study was to identify the most noticeable work-related stressors, the physical and emotional manifestations of work-related stress, and coping strategies used to reduce stress as reported by K-5 teachers in select northern Minnesota elementary schools.

The quantitative study data were collected through the use of a 21 question online survey distributed to kindergarten through fifth grade teachers in select northern Minnesota school districts. There were 119 teacher responses to the survey.

Research questions. The data were analyzed and results categorized according to each of the following research questions.

1. What did kindergarten through fifth grade classroom teachers in select northern Minnesota schools report as the most noticeable stressors they experienced in their teaching positions?
2. What did kindergarten through fifth grade classroom teachers in select northern Minnesota schools identify as the emotional and physical manifestations of work-related stress they experienced?
3. What did kindergarten through fifth grade classroom teachers in select northern Minnesota schools identify as strategies they utilized to cope with work-related stressors?

Conclusions

This section addresses each research question's major findings and the related literature associated with those findings.

Research Question 1: What did kindergarten through fifth grade classroom teachers in select northern Minnesota schools report as the most noticeable stressors they experienced in their teaching positions?

The work-related stressor identified by respondents as extremely noticeable was for the selection, behaviors negatively impact my ability to perform my job. Respondents also identified very noticeable and moderately noticeable work-related stressors as: there is little time to prepare for my lessons/responsibilities; there is too much work to do; the pace of the school day is too fast; and there is too much paperwork in my job.

Literature supports these findings identified by the study respondents. For instance, student misbehavior, working environment, and intensified stressors were noted as possible causes of work-related stress for teachers (Fisher, 2011). Subsequently, the 2017 American Psychological Association article *Coping with Stress at Work*, listed specific sources linked to work-related stress. Examples included low salaries, excessive workloads, limited prospect for advancement, reduced support, lack of control over circumstances, and the conflicting demands or vague work expectations (APA, 2017a).

In three separate studies described in the literature review, the work-related stressors identified by study participants as extremely noticeable, very noticeable and moderately noticeable were confirmed.

In a study by Demjaha et al. (2015) they substantiated the study results that, as a profession, teaching is progressively becoming a stressful occupation due to increased responsibilities and demanding deadlines (Minarik et al., 2003). Role overload, another term for excessive workload, exists when an individual fulfills multiple roles simultaneously and lacks the resources to perform them. It can evolve from both excessive time demands and excessive

psychological demand. Role strain is an outcome of role conflict and overload (Creary & Gordon, 2016).

In another study conducted by Fimian and Fastenau (1990), 3,401 teachers from seven states participated in a Teacher Stress Inventory (TSI). The TSI, developed by Fimian, measured the strength of different stressful events related to the roles of teachers and how they perceived those stressors. Environmental-specific work-related stressors included a lack of preparation time, work overload, oversized classes, and mandatory paperwork. Additionally, discipline and motivation were two components of teacher-student relationships that were found to be stressful. While some teachers often reported good classroom management, they were stressed with the constant work of running a smooth classroom while addressing students' misbehaviors (Fimian & Fastenau, 1990). It was also found that student behavior was often linked to the corresponding school policies that addressed the behavior.

A third study, such as the one conducted by Skaalvik and Skaalvik (2015), indicated teaching as a whole was stressful as reported by their results from a 30-teacher participant study. Those study results indicated workload and time pressure as particularly stressing for the majority of teachers ($n = 30$). The misbehavior or discipline problems of students were identified as a source of stress for 25 of their study's respondents, and the lack of compatibility between the school's values and beliefs and their own personal beliefs and goals caused stress in 17 of their study's teachers. The researchers' concluded that teaching as a whole was reported as a stressful profession, but the level of stress was individual to each person (Skaalvik, & Skaalvik, 2015).

In summary, respondents reported that day to day teaching and paperwork expectations with little time to prepare created stress. Moreover, the misbehavior of students and the lack of disciplinary measures teachers can employ only add to an already stressful environment.

Research Question 2. What did kindergarten through fifth grade classroom teachers in select northern Minnesota schools identify as the emotional and physical manifestations of work-related stress they experienced?

Of the manifestations of stress identified by respondents, physical manifestations of stress (physical exhaustion, days when I feel tired before I arrive at work, and becoming fatigued in a very short period of time) were reported by 89.0% of study respondents and a total of 56.8% of manifestations of stress reported by study respondents were considered to be emotional manifestations (feeling anxious). These findings coincide with published findings from the American Psychological Association help center article *Stress effects on the body*, which stated work-related stress can produce physical and emotional manifestations (APA, 2017b).

Physical manifestations, generally characterized by some degree of physical exhaustion or a general feeling of being tired and rundown (Evers et al., 2000; Noushad, 2008) included fatigue manifestations, cardiovascular manifestations, gastronomical manifestations, and behavioral manifestations (Fimian & Fastenau, 1990). Fatigue was manifested in a range of stress-related signs; headaches, sleeping more than normal or having insomnia, procrastinating, lacking energy to the point of experiencing physical weakness, fatigued over a short amount of time, physical exhaustion, and even physical limitations (Fimian & Fastenau, 1990; Noushad, 2008; Evers et al., 2000).

Emotional manifestations (i.e., psychological manifestations) were characterized as how teachers responded emotionally to stressful work situations based on how the teacher described his/her emotional state. Feeling insecure, feeling vulnerable, the inability to cope, feeling depressed, and feeling anxious were all varying ways emotional manifestations were characterized (Fimian & Fastenau 1990).

Hargreaves (1998) further noted that teaching requires an intense level of emotional work and feeling worried, guilty, powerless, fearful, vulnerable, and disappointed are all emotions experienced by teachers and can change moment by moment, and day by day (Hargreaves, 1998).

Chang (2009) examined emotions experienced by teachers, such as anxiety, frustration, and guilt. Lazarus (2001) remarked that anxiety resulted when one was confronted with “existential threats” (Lazarus, as cited in Chang, 2009, p. 207). In the case of teachers, anxiety was experienced when they had very little control over situations causing a circumstance-based emotion (Chang, 2009).

Additionally, teachers who experience high levels of stress tend to have a lower tolerance for classroom disruptions and withdraw from social interactions with students and colleagues (Leithwood et al., as cited in Research Services; Zhang & Sapp, 2008).

In summary, teachers reported they experienced a vast array emotional responses and varying degrees of physical exhaustion, depending on environmental factors and their unique, personal approach of responding to work-related stress.

Research Question 3: What did kindergarten through fifth grade classroom teachers in select northern Minnesota schools identify as strategies they utilized to cope with work-related stressors?

Teacher coping is a term used to describe how teachers actually react to and address the challenges and problems they face every day (Parker & Martin, 2009). By implementing adequate preventive coping resources, teachers can decrease the number of events they interpret as stress threats, thus reducing or eliminating stress response triggers (McCarthy et al., 1997).

The ways in which people behave when dealing with stress was termed “ways of coping” and problem-solving and support-seeking were two such examples of coping behaviors (Skinner & Beers, 2016). The APA’s (2018) Psychology Center published an article *Coping with Stress at Work*, which listed problem-solving and support-seeking steps as a way to manage one’s overall stress. The majority of the steps were problem-solving strategies such as:

- 1) journal work-related stressors to find patterns of stressors and how those stressors were addressed;
- 2) develop healthy responses to stress such as exercise, making time for hobbies or vacations, limiting caffeine and screen time at night and getting enough rest; rather than quick fixes such as drinking alcohol and eating fast food;
- 3) establish work-life boundaries to reduce work-life conflicts and the stress of ongoing communication 24 hours a day; and
- 4) learn relaxation techniques such as meditation, deep breathing, and mindfulness.

Coping strategies critical to managing stress have historically included exercise, talking to others with similar experiences, and seeking professional help as methods for coping with work-related stress (Freudenberger, 1974). While not a comprehensive list, more recent coping methods included mindfulness (Skinner & Beers, 2016), developing healthy responses, establishing boundaries, and obtaining support from others as methods to cope with work-related stress (APA, 2017a).

The study results revealed that 29.1% or 32 of 110 of study respondents selected personal and family relationships as their number one strategy to cope with work-related stressors. This was followed by physical activity with 17.1% or 18 of 105 study respondents, entertainment with

16.0% or 16 of 100 respondents, and medication by 11.3% or 12 study respondents. Food was identified as a way to cope with stress by 9.0% or 10 of 111 study respondents.

It was not surprising that personal and family relationships were reported as the coping strategies utilized most often. Other coping strategies reported by study respondent were also not unexpected and those included: physical activity, entertainment, medication, and food.

In the literature review it was reported that teachers suffering from burnout typically chose unhealthy responses such as adopting unhealthy eating habits, and using drugs such as sleeping pills, tranquilizers, and mood elevators (Omdahl & Fritz; & Potter, as cited in Research Services, 2010). An unexpected finding of the study was that of the strategy chosen least, alcohol. In previous research, Omdahl and Fritz (2006) and Potter (2005), reported teachers suffering from burnout typically chose unhealthy responses such as drinking more alcohol or caffeine.

In recent years, mindfulness-based approaches have been recognized as an effective means to begin and maintain overall health and well-being (Baer, 2003; Brown & Ryan, 2003; Williams et. al., 2001), but survey results did not support this as a selected coping strategy.

Kyriacou (2001) found eliminating stress was far more effective than simply lessening the source of stress. Examples provided included keeping feelings in check, organizing time, prioritizing needs, and seeking out a supportive colleague and/or principal (Kyriacou, 2001). Supportive environments were also found to be related to teachers' motivation to stay in the profession (Weiss, 1999). The APA (2018) publication mentioned support systems provided by employers through the Employee Assistance Program (EAP) as a means to assist employees in resolving personal problems affecting the employee's performance. Counseling and mental health referrals were two available resources and usually were paid 100% by the employer.

In summary, study respondents were varied in the coping strategies they reported they used to cope with work-related stress. Research suggested that if teachers can implement long-term preventive coping mechanisms to promote their overall health and well-being, such as finding personal and family support and seeking counseling; they can learn to ultimately minimize situations that were once interpreted as stress threats, thus reducing their level of stress.

Demographic Information from the Study: Overall, the majority of those who responded to the survey reported 11 or more years of teaching experience. Of those, 18.6% teachers reported 11-15 years of teaching experience and 50% reported 16+ years of teaching experience. While the literature review did not focus on years of teaching experience, the researcher included the demographic information to determine if this was an area for further exploration and research.

Discussion

The major findings from the first research question, which asked the most noticeable stressors teachers experienced in their positions, were not surprising and paralleled the literature review.

Chang (2009) reported job demands, such as work environment (i.e., behaviors of students, workload) (Chang, 2009; Cheek et al., 2003; Hakanen et al., 2006), were the leading precursors to teacher burnout. Researchers, Hakanen et al. (2006) and Cheek et al. (2003), stated at any given time, between five and thirty percent of teachers showed clear symptoms of burnout which was predicted by their perceptions of their working environment (Hakanen et al., 2006; Cheek et al., 2003).

Student misbehavior is a major concern for schools today. When student behaviors need to be addressed, classroom learning is interrupted. When learning cannot take place, teachers are

unable to what they were hired to do, teach. School policies that address behavior seem to focus on extreme behavior issues rather than the day to day student misbehaviors teachers encounter in their classrooms. Student behaviors were mentioned in the literature review and by study participants as a cause of stress.

Excessive teacher workloads and essentially having to do more with less were major sources of work-related stress. An important point to make is that rarely are teachers able to reduce or eliminate the amount of duties and responsibilities for which they are held accountable. Standardized testing, special education paperwork requirements, budget reductions affecting teacher materials and additional personnel in the classrooms to assist with intense student behaviors, all serve to create stressful working environments for classroom teachers.

Research found in literature suggested that psychological (emotional) symptoms, such as feelings of anger, dissatisfaction, frustration, and anxiety, were all normal symptoms found at any job (Noushad, 2008). Consequently, the emotional manifestation of feeling anxious as the response chosen the most by the study respondents ($n = 21$) was not unexpected. However, what was interesting were the limited number of responses ($n = 6$) for feeling depressed. In the researcher's experience as a classroom teacher, anxiety (anxiousness) and depression usually occur simultaneously.

The researcher concluded from the review of literature that physical and emotional manifestations of work-related stress are dependent on certain particulars of the job, the existence of work stressors out of the person's control, the amount of work and home support, and even the manner in which a person copes with job stress, as well the extent of job stress can be different for each person, as described by Johnson et al. (2005). Therefore, different responses could be obtained depending on the day of the week, the time of day, or in the moment in which

the survey was taken. Even though the survey questions for the study asked respondents to select from the options of never, rarely, sometimes, often, and always, the degree to which the respondents' reacted to the statements at that moment in time could vary.

Research Question 3 asked study respondents to rank 10 items from 1-10, with 1 as the coping strategy used most and 10 the least used coping strategy.

Despite survey issues, the results were somewhat surprising as the researcher assumed that physical activity and alcohol would be at the top of the list. From literature review research, teachers typically chose either healthy responses to stress, such as physical activity, or quick fixes, such as alcohol.

The APA's (2018) Psychology Center published an article *Coping with Stress at Work*, which listed problem-solving and support-seeking steps to manage one's overall stress. One of those steps included developing healthy responses to stress such as exercise, making time for hobbies or vacations, limiting caffeine and screen time at night and getting enough rest, rather than unhealthy quick fixes such as drinking alcohol and eating fast food. This led the researcher to infer that physical activity and alcohol were often choices chosen by those who were stressed.

Furthermore, as reported by researchers Kirsta (1987) and Nathan et al. (1989), stress often resulted in physiological manifestations such as the increased use of alcohol. Fimian & Fastenau (1990), Noushad (2008), and Evers et al. (2000) also found that people tend to either eat more or less food than normal and/or increase their use of alcohol or tobacco, due to the stress they encountered. And, Kirsta (1987) and Nathan et al. (1989) reported warning signs of stress consisted of increased use of alcohol, hunger for sweets, fried and/or fast foods (Kirsta & Nathan et. al., as cited in Sorenson, 2007).

While physical activity did score quite high as a coping strategy, alcohol was chosen by only 1.0% of the study respondents. This low response could be because it is conceivable that respondents believed that choosing alcohol as a coping strategy could result in a negative personal impression.

Research by the American Psychological Association (2017) described behavioral manifestations often chosen by teachers to cope with work-related stress as unsuitable approaches. These coping mechanisms were unhealthy because they only resulted in short term fixes. Examples of unhealthy behavioral manifestations used to cope with stress included the use of over-the-counter and prescription drugs and increased use of alcohol.

Research conducted on mindfulness-based approaches to coping with stress revealed that they were recognized as effective means to begin and maintain overall health and well-being (Baer, 2003; Brown & Ryan, 2003; Williams et. al., 2001). Because of this, it was surprising that the study respondents did not report this strategy as one they used very often to cope with work-related stress. This may be a result of the relative recent research on the concept of mindfulness. For instance, Roeser et al. (2012) provided examples of other mindfulness-based programs which could be customized to meet the needs of the teachers and school districts including Cultivating Awareness and Resilience in Education (CARE for teachers); Stress Management and Relaxation Techniques (SMART-in-Education); Inner Resilience, Mindfulness, Courage, and Reflection for Educators; Mindful Schools; and Passageworks Soul of Education Courses for Teachers (Roeser et al., 2012). It was hypothesized by Roeser et. al. (2012), when teachers were able to safeguard and develop self-governing means through mindfulness training, often times teachers sustained more supportive relationships in the classroom and promoted a conducive

climate in regards to classroom management, which led to greater student engagement and instruction (Roeser et al., 2012).

Feldman et. al. (2007) reported that mindfulness should reduce the maladaptive ways of coping such as helplessness, opposition and submission, but promote adaptive means of coping like problem-solving, information seeking, and self-reliance. If teachers found coping strategies, such as mindfulness, to reduce stress, physical and mental health problems, and even burnout (Skinner & Beers, 2016); perhaps teachers would avoid engaging in maladaptive coping strategies (i.e., alcohol) which served to provide “quick fixes”, but had long-term health effects (Lindquist & Cooper, 1999).

As stated in the literature review, mindfulness programs have been created and research states that adaptive means, such as mindfulness, could promote long term, healthy means of coping and should reduce maladaptive ways, such as alcohol which is considered a quick fix.

Limitations

In addition to the delimitations identified at the forefront of the study, limitations surfaced during the administration of the study that were unforeseen. Roberts (2010) defined limitations as “features of your study that you know may negatively affect the results of your study or your ability to generalize... areas over which you have no control” (p. 162).

Limitations of the study included: The survey results were limited due to multiple survey link issues. The first survey link, which collected 20 responses, was not designed to have forced responses; meaning participants could not proceed to the next question until study respondents provided a response to the first question. The survey link was updated and sent out again. Updating the survey fixed the force responses, but created another problem for Research Question 3. Study respondents were asked to rank coping strategies 1-10, but when one choice

was selected and the respondent moved to the next choice, the previous choice would be erased. Again, the link was updated and participants were able to complete the survey; regardless of the issue. The final issue was the last survey link opened to the last question, which was the demographic question. Some participants realized they had to select the previous button, while others only answered the demographic question. This caused inconsistent participant numbers across the survey.

Recommendations for Further Research

1. It is recommended that a replication study be conducted to survey K-5 elementary teachers in rural areas in three or more states to allow for greater generalization of results.
2. It is recommended that a mixed methods study be conducted to include a quantitative component and a qualitative component. Study participants would participate in a survey and in interviews. The interviews could be beneficial in determining how effective three long-term healthy coping methods; mindfulness, physical exercise, and nutrition are in reducing work-related stress.
3. It is recommended that the study be replicated with secondary teachers to determine any variance in responses from the elementary teachers' responses.
4. It is recommended that a mixed method study be conducted to include a quantitative component and a qualitative component. K-5 elementary teachers in Minnesota could be asked to rank coping strategies from the most to the least effective coping strategy to reduce their work-related stress. The interviews could then be beneficial in determining why.

5. It is recommended that a study be conducted of Minnesota K-12 teachers using Lazarus & Folkman's (1984) Stress and Coping model which indicates the general level of stress felt by teachers using three factors: personality, the intensity of the situation, and perceived coping strategies.
6. It is recommended that the study be replicated with K-5 elementary teachers in other Minnesota elementary schools with assurance that the technical issues with the original survey would be resolved and using only an even number of response choices rather than an odd number.

Recommendations for Practice

1. Principals could identify, using an open-ended survey, the work-related stressors their teachers report that are detrimental to their teaching.
2. Principals could collaborate with their teachers on approaches to help reduce work-related stressors for the teaching staff through professional development.
3. Superintendents and principals could identify current health and well-being professional development programs available to school districts in order to support their teachers in promoting long term, healthy coping methods.
4. Teachers could create healthy short-term and long-term goals to cope with their work-related stressors.

Summary

In Chapter 5 conclusions were drawn from the survey data, the findings and observations were discussed, the limitations of the study were explored, and recommendations for future study and practice were made.

The study results confirmed what researchers have found in previous studies.

Researchers, Scott (2010) and Hutman et al. (2005), found stressors leading to burnout were attributed to situations where employees felt overworked (Hutman et al., 2005; Scott, 2010). Furthermore, as a profession, teaching is increasingly becoming more stressful due to growing responsibilities and overall demands of the job (Demjaha et al., 2015); causing teachers to leave the profession resulting in a national epidemic of teacher departures (McCarthy et al., 2009).

Work-related stress that may lead to burnout is not a new concept. In any job, stress is inevitable and there are different stressors for different occupations. It also is not a new discovery that people respond to stress in different ways and how people respond to stress is dependent on the individual and the intensity of the stressors felt by that individual. Lazarus and Folkman's (1984) Stress and Coping model indicated the general level of stress felt by teachers depended on three factors: their personality, the intensity of the situation, and their perceived coping strategies (Lazarus & Folkman, as cited in Antoniou et al., 2013). As well, the coping strategies utilized by teachers, whether healthy or unhealthy, are critical to their abilities to perform at optimal levels in the classroom.

The study is of importance to anyone who works in education and with educators because stress may lead to teacher burnout which research has shown is on the rise due to the increasing responsibilities and demands of the job. Teachers are asked to do more with less and encounter students with behavior and mental issues for which they have not been adequately trained.

The main intent of the study was to remind teachers that there are both short term and long term healthy coping strategies. In addition, the study served to suggest to teachers who experience work-related stress that they could benefit from utilizing coping mechanisms to

reduce stress and to encourage them to contemplate the use of healthy strategies to manage their stress.

Furthermore, the researcher believes that school districts leaders should become more aware of the immense stress teachers encounter and invest in professional development, such as mindfulness-based programs, that are available and can be tailored to benefit the individual needs of their teachers and, subsequently, the students.

References

- Admiraal, W. F., Korthagen, F. A. J., & Wubbels, T. (2000). Effects of student-teachers' coping behavior. *British Journal of Educational Psychology, 70*, 33-52.
doi:10.1348/000709900157958
- American Psychological Association (APA). (2017a). *Coping with stress*. Retrieved May 24, 2017 from <http://www.apa.org/helpcenter/work-stress.aspx>
- American Psychological Association (APA). (2017b). *Stress effects on the body*. Retrieved May 24, 2017 from <http://www.apa.org/helpcenter/stress-body.aspx>
- American Psychological Association. (2017c). *Stress won't go away? Maybe you are suffering from chronic stress*. Retrieved May 24, 2017 from <http://www.apa.org/helpcenter/understanding-chronic-stress.aspx>
- American Psychological Association (APA). (2018). *Managing your boss*. Retrieved from <https://www.apa.org/helpcenter/boss>
- Antoniou, A., Ploumpi, A., & Ntalla, M. (2013). Occupational stress and professional burnout in teachers of primary and secondary education: The role of coping strategies. *Psychology, 4*(3), 349-355. doi:10.4236/psych.2013.43a051
- Antoniou, A., Polychroni, F., & Vlachakis, A.-N. (2006). Gender and age differences In occupational stress and professional burnout between primary and high-school teachers in Greece. *Journal of Managerial Psychology, 21*, 682-690.
doi:10.1108/02683940610690213
- Austin, V., Shah, S., & Muncer, S. (2005). Teacher stress and coping strategies used to reduce stress. *Occupational Therapy International, 12*, 63-80. doi:10.1002/oti.16

- Baer, R. A. (2003). Mindfulness training as a clinical intervention: A conceptual and empirical review. *Clinical Psychology: Science and Practice, 10*(2), 125-143.
doi:10.1093/clipsy.bpg015
- Bakker, A. B., Demerouti, E., & Verbeke, W. (2004). Using job demands-resources model to predict burnout and performance. *Human Resource Management, 43*(1), 83-104.
doi:10.1002/hrm
- Banerjee, S., & Mehta, P. (2016). Determining the antecedents of job stress and their impact on job performance: A study among faculty members. *The IUP Journal of Organizational Behavior, 15*(2), 7-24. Abstract retrieved from <https://www.questia.com>
- Beers, J. C. (2012). Teacher stress and coping: Does the process differ according to years of teaching experience? (Doctoral dissertation), Portland State University. Retrieved from PDXScholar. (Paper 809).
- Berryhill, J., Linney, J. A., & Fromewick, J. (2009). The effects of educational accountability on teachers: Are policies too stress-provoking for their own good? *International Journal of Educational Policy and Leadership, 4*, 1-15. doi:10.1177/0013161X90026003003
- Bishop, S. R., Lau, M., Shapiro, S., Carlson, L., Anderson, N. D., Carmody, J., ... Devins, G. (2004). Mindfulness: A proposed operational definition. *Clinical Psychology: Science and Practice, 11*(3), 230-241. <http://doi.org/10.1093/clipsy.bph077>
- Bivona, K. N. (2002). *Teacher morale: The impact of teaching experience, workplace conditions, and workload*. Retrieved from <https://eric.ed.gov/?id=ED467760>
- Blasé, J., Blasé, J., & Du, F. (2008). The mistreated teacher: A national study. *Journal of Educational Administration, 46*(3), 263-301. doi:10.1108/09578230810869257

- Boyle, G., Borg, M., Falzon, J., & Baglioni, Jr., A. (1995) A structural model of dimensions of teacher stress. *British Journal of Educational Psychology*, 65, 49-67. <http://dx.doi.org/10.1111/j.2044-8279.1995.tb01130.x>
- Brown, K. W., & Ryan, R. (2003). The benefits of being present: Mindfulness and its role in psychological well-being. *Journal of Personality and Social Psychology*, 84(4), 822-848. doi:10.1037/0022-3514.84.4.822
- Calan, M., Wainwright, D., Forsythe, M., Wall, B., & Almond, S. (2001). Mental health and stress in the workplace: The case of general practice in the UK. *Social Science Medicine*, 52(4) 499-507 doi: [http://doi.org/10.1016/S0277-9536\(00\)00155-6](http://doi.org/10.1016/S0277-9536(00)00155-6)
- Carter, S. B. (2013). The tell tale signs of burnout ... do you have them? *Psychology Today*. Retrieved from <https://www.psychologytoday.com/us/blog/high-octane-women/201311/the-tell-tale-signs-burnout-do-you-have-them>
- Chang, M. (2009). *Teacher emotion management in the classroom: Appraisal, regulation, and coping*. (Doctoral dissertation). Available from ProQuest SE Dissertations and Theses Database. (UMI No. 3375724). doi: 10.1007/s10648-009-9106-y
- Cheek, J. R., Bradley, L. J., Parr, G., & Lan, W. (2003). Using music therapy techniques to treat teacher burnout. *Journal of Mental Health Counseling*, 25(3), 204-217. doi:10.17744/mehc.25.3.ghneva55qw5xa3wm
- Chung, I.-S., Lee, M.-Y., Jung, S.-W., & Nam, C.-W. (2015). Minnesota multiphasic personality inventory as related factor for post-traumatic stress disorder symptoms according to job stress level in experiences firefighters: 5-year study. *Annals of Occupational and Environmental Medicine*, 27(16), 1-6. doi:10.1186/s40557-015-0067-y

- Clegg, A. (2001). Occupational stress in nursing: A review of the literature. *Journal of Nursing Management*, 9(2), 101-106. doi:10.1046/j.1365-2834.2001.00216.x
- Cox, S., Parmer, T., Tourkin, S., Warner, T., & Lyter, D. M. (2007). *Documentation for the 2004-2005 teacher follow-up survey (NCES 2007-349)*. U.S. Department of Education. Washington, DC: National Center for Education Statistics. Retrieved from <http://nces.ed.gov/>
- Creary, S. J., & Gordon, J. B. (2016). Role conflict, role overload, and role strain. *Wiley Online Library*. <https://doi.org/10.1002/9781119085621.wbefs012>
- Cronbach, L. J. (1951). Coefficient alpha and the internal structure of tests. *Psychometrika*, 16, 297-334
- Darling-Hammond, L. (2003). Keeping good teachers: Why it matters, what leaders can do. *Educational Leadership*, 60(8), 6-13. Retrieved from <http://www.ascd.org/publications/educational-leadership/may03/vol60/num08/Keeping-Good-Teachers@-Why-It-Matters,-What-Leaders-Can-Do.aspx>
- Demerouti, E., Bakker, A., Nachreiner, F., & Schaufeli, W. (2001). The job demands-resources model of burnout. *Journal of Applied Psychology*, 86(3), 499-512. doi:10.1037/0021.9010.86.3.499
- Demjaha, T. A., Bislimovska, J. K., & Mijakoski, D. (2015). Level of work-related stress among teachers in elementary schools. *Open Access Macedonian Journal of Medical Sciences*, 3(3), 484-488. doi:10.3889/oamjms.2015.076
- Dollard, M. F., Winefield, A. H., & Winefield, H. R. (Eds.), *Occupational stress in the service professions*. New York, NY: Taylor and Francis.

- Dworkin, A. G. (2001). Perspectives on teacher burnout and school reform. *International Education Journal*, 29(2), 69-78. Retrieved from <http://www.flinders.edu.au/education/iej>
- Dworkin, A. G., Saha, L. J., & Hill, A. N. (2003). Teacher burnout and perceptions of a democratic school environment. *International Education Journal*, 4(2), 108-120. Retrieved from <http://iej.cjb.net>
- Evers, W. J. G., Gerrichhauzen, J., & Tomic, W. (2000). *The prevention and mending of burnout among secondary school teachers*. Heerlend, Netherlands: The Open University. Retrieved from <https://dspace.ou.nl/bitstream/1820/3213/1/THE%20PREVENTION%20AND%20MENDING%20OF%20BURNOUT%20AMONG%20SECONDARY%20SCHOOL%20TEACHERS%201.pdf>
- Evers, W. J. G., Tomic, W., & Brouwers, A. (2004). Burnout among teachers: Students' and teachers' perceptions compared. *School Psychology International*, 25(2), 131-148. doi:10.1177/0143034304043670
- Farber, B. A. (1984). Stress and burnout in suburban teachers. *The Journal of Educational Research*, 77(6), 325-331. <https://doi.org/10.1080/00220671.1984.10885550>
- Fimian, M. J. (1988). *The teacher stress inventory test manual*. Retrieved from <http://www.instructionaltech.net.TSI/index.htm>
- Fimian, M. J., & Fastenau, P. S. (1990). The validity and reliability of the Teacher Stress Inventory: A re-analysis of aggregate data. *Journal of Organizational Behavior*, 11(2), 151-157. Retrieved from <http://dx.doi.org/10.1002/job.4030110206>
- Fisher, M. H. (2011). *Factors influencing stress, burnout, and retention of secondary teachers*. Retrieved from <https://www.education.com/topic/current-education-issues/>

- Feldman, G., Hayes, A., Kumar, S., Greeson, J., & Laurenceau, J.-P. (2007). Mindfulness and emotional regulation: The development and initial validation of Cognitive and Affective Mindfulness Scale-Revised (CAMS-R). *Journal of Psychopathology and Behavior Assessment*, 29, 177-190. doi:10.1007/s10862-006-9035-8
- Flook, L., Goldberg, S. B., Pinger, L., Bonus, K., & Davidson, R. J. (2013). Mindfulness for teachers: A pilot study to assess the effects on stress, burnout and teaching efficacy. *Mind Brain Educ.* 7(3), 1-22. doi:10.1111/mbe.12026
- Freudenberger, H. J. (1974), Staff burn-out. *Journal of Social Issues*, 30, 159-165.
doi:10.1111/j.1540-4560.1974.tb00706.x
- Friedman, I. A. (1991). High and low-burnout schools: School culture aspects of teacher burnout. *The Journal of Educational Research*, 84(6), 325-333.
doi:10.1080/00220671.1991.9941813
- Friedman, I. A., & Farber, B. (1992). Professional self-concept as a predictor of teacher burnout. *Journal of Educational Research*, 86(1), 28-35. <https://doi.org/10.1080/00220671.1992.9941824>
- Glendinning, C., Challis, D., Fernandez, J. L., Jacobs, S., Jones, K., ... Wilberforce, M. (2008). *Evaluation of the individual budgets pilot programme*. London: Department of Health.
- Golby, M. (1996). Teachers' emotions: An illustrated discussion. *Cambridge Journal of Education*, 26(3), 423. doi:10.1080/0305764960260310
- Gold, Y., & Roth, R. A. (2013). *Stress and preventing burnout. The professional health solution*. Washington, D.C.: The Falmer Press. Retrieved from <https://lp.bookbane.com/teachers-managing-stress-and-preventing-burnout-gold-yvonne-roth-robert-a.pdf?refhost=hlg.jmacedo.com.br>

- Gonzalez, A., Peters, M. L., Orange, A., & Grigsby, B. (2017). The influence of high-stakes testing on teacher self-efficacy and job-related stress. *Cambridge Journal of Education*, 47(4), 513-531. doi: <http://doi.org/10.1080/0305764X.2016.1214237>
- Greenglass, E. R., & Burke, R. J. (2003). Teacher stress. In M. F. Dollard, A. H. Winefield, & H. R. Winefield (Eds.), *Occupational stress in the service professions* (pp. 213-236). New York, NY: Taylor and Francis.
- Greeson, J. M. (2009) Mindfulness research update: 2008. *Complementary Health Practice Review*, 14, 10-18. doi:10.1177/1533210108329862
- Grossman, P., Niemann, L., Schmidt, S., & Walach, H. (2004). Mindfulness-based stress reduction and health benefits: A meta-analysis. *Journal of Psychosomatic Research*, 57, 35-43. doi:10.1016/S0022-3999(03)00573-7
- Guin, K. (2004). Chronic teacher turnover in urban elementary schools. *Education policy Analysis Archives*, 12, 42. doi:10.14507/eppaa.v12n42.2004
- Haberman, M. (2004). *Teacher burnout in black and white*. Retrieved from http://www.habermanfoundation.org/Articles/PDF/Teacher_Burnout_in_Black_and_White.pdf
- Hakanen, J. J., Bakker, A. B., & Schaufeli, W. B. (2006). Burnout and work engagement among teachers. *Journal of School Psychology*, 43(6), 495-513. doi:10.1016/j.jsp.2005.11.001
- Hanuskek, E. A. (2007). The single salary schedule and other issues of teacher pay. *Peabody Journal of Education*, 82(4), 574-586. doi:10.1080/01619560701602975
- Hargreaves, A. (1998). The emotional politics of teaching and teacher development: with implications for educational leadership. *International Journal of Leadership in Education*, 1(4), 315. doi: [http://dx.doi.org/10.1016/S742-051X\(98\)00025-0bo](http://dx.doi.org/10.1016/S742-051X(98)00025-0bo)

- Hargreaves, A. (2004). Inclusive and exclusive educational change: Emotional responses of teachers and implications for leadership. *School Leadership and Management*, 24(3), 287-309. doi: <http://doi.org/10.1080/1363243042000266936>
- Hargreaves, A., & Tucker, E. (1991). Teaching and guilt: Exploring the feelings of teaching. *Teaching and Teacher Education*, 7, 491-505. doi:10.1016/0742-051X(91)9044-P
- Hobfoll, S. E., Schwarzer, R., & Chon, K. K. (1998). Disentangling the stress labyrinth: Interpreting the meaning of the term stress as it is studied in the health context. *Anxiety, Stress, and Coping*, 11, 181-212. doi:10.1080/10615809808248311
- Hofmann, S. G., Sawyer, A. T., Witt, A. A., & Oh, D. (2010). The effect of mindfulness-based therapy on anxiety and depression: A meta-analytic review. *Journal of Consulting and Clinical Psychology*, 78(2), 169. doi:10.1037/a0018555
- Hölzel, B. K., Lazar, S. W., Gard, T., Schuman, Olivier, Z., Vago, D. R., & Ott, U. (2011). How does mindfulness mediation work? Proposing mechanism of action from a conceptual and neural perspective. *Perspectives on Psychological Science*, 6(6), 537-559. doi:10.1177/1745691611419671
- Howard, S., & Johnson, B. (2004). Resilient teachers: Resisting stress and burnout. *Social Psychology Education*, 7(4), 399-420. doi:10.1007/s11218-004-0975-0
- Hutman, S., Jaffe, J., Segal, R., Kemp, G., & Dumke, L. F. (2005). Burnout: Signs, symptoms, and prevention. Retrieved from Workplace Stress43: http://helpguide.org/mental/burnout_signs_symptoms.htm
- Ingersoll, R. (2012). Beginning teacher induction: What the data tell us. *Phi Delta Kappan*, 93(8), 47-51. Retrieved from <http://www.kappanmagazine.org/content/93/8/47>

- Ingersoll, R. M., & Smith, T. M. (2003). The wrong solution to the teacher shortage. *Educational Leadership*, 60(8), 30-33. Retrieved from http://repository.upenn.edu/gse_pubs/126
- Jazzar, M., & Algozzine, B. (2006). *Critical issues in education leadership*. Boston: Pearson Education.
- Jennett, H. K., Harris, S. L., & Mesibov, G. B. (2003). Commitment to philosophy, teacher efficacy, and burnout among teachers of children with autism. *Journal of Autism and Developmental Disorders*, 33(6), 583-593. doi:10.1023/b:jadd.0000005996.19417.57
- Jepson, E., & Forrest, S. (2006) Individual contributory factors in teacher stress: The role of achieving striving and occupational commitment. *British Journal of Educational Psychology*, 76, 183-197. doi:10.1348/000709905X37299
- Johnson, S., Cooper, C., Cartwright, S., Donald, I., Taylor, P., & Millet, C. (2005). The experience of work-related stress across occupations. *Journal of Managerial Psychology*, 20(2), 178-187. doi:10.1108/02683940510579803
- Kabat-Zinn, J. (1994). *Wherever you go, there you are: Mindfulness meditation in everyday life*. Retrieved from chadpearce.com
- Karasek, R., (1979). Job demands, job decision latitude, and mental strain: Implications for job redesign. *Administrative Science Quarterly*, 24(2), 285-308. doi:10.2307/2392498
- Kasl, S. V. (1978). Epidemiological contributions to the study of work stress. In C. L. Cooper & R. Payne (Eds.), *Stress at work*. Chichester: John Wiley.
- Kirkcaldy, B. D., & Martin, T. (2000). Job stress and satisfaction among nurses: Individual differences. *Stress Medicine*, 16(2) 77-89. doi:10.1002/(SICI)1099-1700(200003)16:2%3C77::AID-SMI835%E3.0.CO;2-z

- Kyriacou, C. (2001). Teacher stress: Directions for future research. *Educational Review*, 53(1), 27-35. <http://doi.org/10.1080/00131910120033628>
- Kyriacou, C., & Sutcliffe, J. (1977). Teacher stress: A review. *Educational Review*, 29, 299-306. Abstract retrieved from <http://www.tandfonline.com>
- Lazarus, R. S., & Folkman, S. (1987). Transactional theory and research on emotions and coping. *European Journal of Personality*, 1, 141-169. doi: <http://doi.org/10.1002/per.2410010304>
- Leece, J., & Leece, D. (2010). Personalisation: Perceptions of the role of social work in a world of brokers and budgets. *British Journal of Social Work*, 41, 204-223. [10.1093/bjsw/bcq087](http://doi.org/10.1093/bjsw/bcq087).
- Leedy, P. D., & Ormrod, J. E. (2010). *Practical research: Planning and design* (9th ed.). New York City: Merrill.
- Leithwood, K., Jantzi, D., & Steinbach, R. (2001). Maintaining emotional balance. *Educational Horizons*, 79(2), 73-82.
- Lindquist, T. L., & Cooper, C. L. (1999). Using lifestyle and coping to reduce job stress and improve health in 'at risk' office workers. *Stress Medicine*, 15(3), 143-152. doi:10.1002/(SICI)1099-1700(199907)15:3<143:AID-SMI808>3.0.CO;2-4
- Litt, M. D., & Turk, D. C. (1985). Sources of stress and dissatisfaction in experienced high school teachers. *The Journal of Educational Research*, 78, 178-185. doi:10.1080/00220671.1985.10885596
- Mark, G., & Smith, A. P. (2012). Occupational stress, job characteristics, coping and the mental health of nurses. *British Journal of Health Psychology*, 17, 505-521. doi:10.1111/j.2044-8287.2011.02051.x

- Maslach, C. (1993). Burnout: A multidimensional perspective. In W. B. Schaufeli, C. Maslach, & T. Marek (Eds.), *Professional burnout: Recent developments in theory and research* (pp. 19-32). Washington, DC: Taylor & Francis.
- Maslach, C., Jackson, S. E., & Leiter, M. P. (1996). *Maslach burnout inventory manual* (3rd ed.). Palo Alto: Consulting Psychologists Press.
- McCarthy, C. J., Lambert, R. G., & Brack, G. (1997). Structural model of coping, appraisals, and emotions after relationship breakup. *Journal of Counseling and Development, 76*(1), 53-64. <https://doi.org/10.1002/j.1556-6676.1997.tb02376.x>
- McCarthy, C., Lambert, R. G., O'Donnell, M., & Melendres, L. T. (2009). The relation of elementary teachers' experience, stress, and coping resources to burnout symptoms. *The Elementary School Journal, 109*(3), 282-300. doi:10.1086/592308
- Melamed, S., Shirom, A., Toker, S., & Shapira, I. (2006). Burnout and risk of type 2 diabetes: A prospective study of apparently healthy employed persons. *Psychosomatic Medicine, 68*(6), 863-869. doi:10.1097/01.psy.0000242860.24009.f0
- Minarik, M. M., Thornton, B., & Perreault, G. (2003). Systems thinking can improve teacher retention. *The Clearing House: A Journal of Educational Strategies, Issues and Ideas, 76*(5), 230-234. doi:10.1080/00098650309602010
- Mulvenon, S., Stegman, C. H., & Ritter, G. (2005). Test anxiety: A multifaceted study on the perceptions of teachers, principals, counselors, students, and parents. *International Journal of Testing, 5*(1), 37-61. doi: http://dx.doi.org/10.1207/s15327574ijt0501_4

- Noushad, P. P. (2008). *From teacher burnout to student burnout*. Online submission to Educational Resources Information Center. ERIC Document Reproduction Services No. ED502150. Retrieved from <http://files.eric.ed.gov/fulltext/ED502150.pdf>
- Otto, R. (1986). *Teachers under stress: Health hazards in work role and modes of response*. Melbourne: Hill of Content.
- Parker, P. D., & Martin, A. J. (2009). Coping and buoyancy in the workplace: Understanding their effects on teachers' work-related well-being and engagement. *Teaching and Teacher Education, 25*, 68-75. doi:10.1016/j.tate.2008.06.009
- Research Services. (2010). *Teacher burnout*, (1003), 1-22. Miami, FL: Christine Balzer. Retrieved from <http://drs.dadeschools.net>
- Roberts, C. (2010). *The dissertation journey*. California: Corwin, A Sage Company.
- Roeser, R. W., Skinner, E., Beers, J., & Jennings, P. A. (2012). Mindfulness training and teachers' professional development: An emerging area of research and practice. *Childhood Development Perspectives, 6*(2), 167-173. doi:10.1111/j.1750-8606.2012.00238.x
- Scott, E. (2006). Stress and burnout: Burnout symptoms and causes. Retrieved from http://stress.about.com/od/burnout/a/stressn_burnout.htm
- Scott, E. (2010). Job burnout: Job factors that contribute to employee burnout. Retrieved from http://stress.about.com/od/burnout/a/job_burnout.htm
- Siegel, R. D., Germer, C. K., & Olendzki, A. (2009). Mindfulness: What is it? Where did it come from? In F. Didonna (Ed.), *Clinical handbook of mindfulness*. New York, NY: Springer.
- Simon, M. K. (2011). *Dissertation and scholarly research: Recipe for success* (2011 ed.). Seattle, WA: Dissertation Success, LLC.

Sinclair, K. E., & Ryan, G. (1987). Teacher anxiety, teacher effectiveness, and student anxiety.

Teaching and Teacher Education, 3, 249-253. doi: [http://doi.org/10.1016/0742-051X\(87\)90007-2](http://doi.org/10.1016/0742-051X(87)90007-2)

Skaalvik, E. M., & Skaalvik, S. (2007). Dimensions of teacher self-efficacy and relations with

strain factors, perceived collective teacher efficacy, and teacher burnout. *Journal of Educational Psychology*, 99, 611-625. doi:10.1037/0022-0663.99.3.611

Skaalvik, E. M., & Skaalvik, S. (2011). Teacher job satisfaction and motivation to leave the

teaching profession: relations with school context, feeling of belonging, and emotional exhaustion. *Teaching and Teacher Education*, 27, 1029-1038. <http://dx.doi.org/10.1016/j.tate.2009.11.001>

Skaalvik, E. M., & Skaalvik, S. (2015). Job satisfaction, stress and coping strategies in the

teaching profession-What do teachers say? *International Education Studies*, 8(3), 181-192. doi:10/5539/ies.v8n3p181

Skinner, E., & Beers, J. (2016). Mindfulness and teachers' coping in the classroom: A

developmental model of teacher stress, coping, and everyday resilience. In K. A. Schonert-Reichl & R. W. Roeser (Eds.), *Handbook of mindfulness in education, mindfulness in behavioral health* (pp. 99-118). New York: Springer-Verlag. doi:10.1007/978-1-4939-3506-2_7

Slavin, R. E. (2007). *Educational research in an age of accountability*. Boston: Pearson.


Smylie, M., & Denny, J. (1990). Teacher leadership: Tensions and ambiguities in organizational

perspective. *Educational Administration Quarterly*, 26(3), 235-259. doi:10.1177.0013161X90026003003

- Sorenson, R. (1999). Conflicts management strategies used by successful family business. *Family Business Review*, 12(4). 325-340. doi:10.1111/lj.1741-6248.1999.00325.x
- Sorenson, R. (2007). Stress management in education: Warning signs and coping mechanisms. *British Educational Leadership*, 21(3), 10-13. doi:10.1177/0892020607079985
- Stormont, M., & Walker, L.-Y. (2017). Supporting professional development needs for early childhood teachers: An exploratory analysis of teacher perceptions of stress and challenging behaviors. Retrieved February 9, 2018 from <http://helpingyoungchildrensoar.org/wp-content/uploads/2017/01/Supporting-Professional-Development-Needs-for-Early-Childhood-Teachers.pdf> doi: 10.1515/ljdhd-2016-0037
- Taylor, G., Shepard, L., Kinner, F., & Rosenthal, J. (2002). *A survey of teachers' perspectives on high-stakes testing in Colorado: What gets taught, what gets lost*. Center for the Study of Evaluation, Standards, and Student Testing, Technical Report 588. Graduate School of Education & Information Studies, University of California, Los Angeles. EIRC Document Reproduction Service No. ED475139. Retrieved from <https://files.eric.ed.gov/fulltext/ED475139.pdf>
- Tyler, P., & Cushway, D. (1998). Stress & well-being in health-care staff: The role of negative affectivity, and perceptions of job demand and discretion. *Stress Medicine*, 14, 99-107. doi:[http://dx.doi.org/10.1002/\(SICI\)1099-1700\(1999804\)14:2<99::AID-SMI766>3.0.CO:2-1](http://dx.doi.org/10.1002/(SICI)1099-1700(1999804)14:2<99::AID-SMI766>3.0.CO:2-1)
- van Veen, K., Slegers, K., & van de Ven, P. (2005). One teacher's identity, emotions and commitment to change: A case study into the cognitive-affective processes of a secondary school teacher in the context of reforms. *Teaching and Teacher Education*, 21(8), 917-934. doi: <https://doi.org/10.1016/j.tate.2005.06.004>

- Weiss, E. M. (1999). Perceived workplace conditions and first year-year teachers' morale, career choice commitment, and planned retention: A secondary analysis. *Teaching and Teacher Education, 15*(8), 861-879. doi: 10.1016/S0742-051X (99) 00040-2
- Wilberforce, M., Jacobs, S., Challis, D., Manthorpe, J., Glendinning, C., ... & Netten, A. (2014). Revisiting the causes of stress in social work: Sources of job demands, control and support in personalized adult social care. *British Journal of Social Work, 44*, 812-830. doi:10.1093/bjsw/bcs166
- Williams, K. A., Kolar, M. M., Reger, B. E., & Pearson, J. (2001). Evaluation of a wellness-based mindfulness stress reduction intervention: A controlled trial. *American Journal of Health Promotion, 15*(6), 422-432. doi: <http://doi.org/10/4278/0890-1171-15.6.422>
- Zembylas, M. (2003). Caring for teacher emotion: Reflections on teacher self-development. *Studied in Philosophy & Education, 22*(2), 103-125. doi: 10.1023/A:10222293304065
- Zhang, Q., & Sapp, D. A. (2008). A burning issue in teaching: The impact of teacher burnout and nonverbal immediacy on student motivation and affective learning. *Journal of Communication Studies, 1*(2), 152-168.

Appendix A: CITI Completion Certificate



CITI PROGRAM

Completion Date 22-May-2017
Expiration Date 21-May-2022
Record ID 23246093

This is to certify that:


Sonia OBryan

Has completed the following CITI Program course:

Basic/Refresher Course - Human Subjects Research	(Curriculum Group)
IRB Training for Graduate Students	(Course Learner Group)
1 - Basic Course	(Stage)

Under requirements set by:

St. Cloud State University



CITI
Collaborative Institutional Training Initiative

Verify at www.citiprogram.org/verify/?w0ab1684e-dbbc-4142-9040-648962fa08d9-23246093

Appendix B: Teacher Stress Inventory Permission of Use

Home Page

<http://www.instructionaltech.net/TSI/>

The Teacher Stress Inventory Info Site

Welcome to the *Teacher Stress Inventory Site*...

Thanks for your interest in the Teacher Stress Inventory (TSI). Though the Inventory is out of print, there is still considerable interest in its use among Master- and Doctoral-level students. As a support to their research activities, TSI-related information is being offered here free of charge. Also offered is the use of the Inventory, at no charge, for research purposes.

Permission for Use

Consider this memo as permission to use the TSI at no cost to you; you may want to print this for your committee and for the Graduate School. Usually, they want a need some proof that you are legally using a scale. Please honor the [copyright policy](#) by using the Inventory for only research and other not-for-profit purposes. You will need to provide us with basic information about who you are, however, so that we can stay in touch with you...

If you haven't already done so, take a moment and contact Michael at Fimian@InstructionalTech.net to inform him of your interest in using the TSI.

Data Contribution

In return, we are interested in receiving a copy of your raw data file, your data bible, and the results chapter of your thesis. These can be submitted in ASCII text form (or the data in either Excel Spreadsheet or Access Database format) via email to Fimian@InstructionalTech.Net. In the future, we'll reanalyze the factor analysis and internal consistency reliabilities, and update this online TSI Manual with your findings. With your permission, a separate page on this site will be established that contains your summary chapter. Please include any references that your work may have with respect to Dissertations Abstracts or other abstract service so that your work may be reviewed online by other TSI users and potential users. A summary will also be added to the "Other Variables" section of this site. Include your email address as well, so that users who do have questions can easily get in touch with you...

Rest assured, your data will be used in no other way...

The Inventory and Terms of Use

A word-processed version of the Inventory can be found [here](#)... Some formatting may be necessary, depending on your word processor. Feel free to cut and paste the items stems and format your own version. The wording of the stress items must remain the same, but you can alter and add the demographic items any way you see fit for your project...

Alternatively, a graphic version of the TSI can be found [here](#)...

And a [PDF version here](#). A flip-page version can be found at the bottom of this page.

Monday, May 8, 2017 at 10:14:38 AM Central Daylight Time

Subject: RE: Teacher Stress Inventory
Date: Monday, April 10, 2017 at 5:16:50 PM Central Daylight Time
From: Michael Fimian
To: Sonia OBryan
CC: fimian@instructionaltech.net

Hi Sonia,

Sounds like an interesting project! Here's some help:

<http://www.instructionaltech.net/TSI/index.htm>

Feel free to make use of the Inventory for this purpose.

Regards,

Michael

Dr. Michael J. Fimian
InstructionalTech.net
37 Gay Rd
Brookfield, MA 01506

774-200-7881
www.InstructionalTech.net

Appendix C: Committee Approval

Friday, December 21, 2018 at 9:50:31 AM Central Standard Time

Subject: Doctoral Dissertation Committee Approval Form
Date: Thursday, September 27, 2018 at 12:50:19 PM Central Daylight Time
From: Anderson, Ann E.
To: OBryan, Sonia M.
CC: Worner, Kay T., Braun-Heurung, Michele L.

Sonia:

The doctoral dissertation committee approval form that you submitted has been received. After reviewing the information, the following individuals have been approved to serve on your dissertation committee:

Kay Worner, chairperson
John Eller
David Lund
Janine Wahl

Ann E. Anderson
Office Manager
School of Graduate Studies
Administrative Services 121
St. Cloud State University
720 S. 4th Avenue
St. Cloud, MN 56301-4498
Phone: 320-308-2121
Fax: 320-308-5371

Appendix D: Proposal Approval

Friday, December 21, 2018 at 9:51:11 AM Central Standard Time

Subject: Report of Doctoral Dissertation Proposal Evaluation Committee
Date: Thursday, October 18, 2018 at 12:46:40 PM Central Daylight Time
From: Anderson, Ann E.
To: OBryan, Sonia M.
CC: Worner, Kay T., Braun-Heurung, Michele L., Houdek, Jeffrey S.

Sonja:

I have received notification that you have passed your doctoral dissertation proposal evaluation on October 10, 2018 for the Educational Administration and Leadership Ed.D. program.

A copy of this information is being forwarded to the Records office so your DARS report can be updated. Please allow a few days for this information to appear in DARS.

ID: 12350942

Ann E. Anderson
Office Manager
School of Graduate Studies
Administrative Services 121
St. Cloud State University
720 S. 4th Avenue
St. Cloud, MN 56301-4498
Phone: 320-308-2121
Fax: 320-308-5371

Appendix E: IRB Approval



Institutional Review Board (IRB)

720 4th Avenue South AS 210, St. Cloud, MN 56301-4498

Name: Sonia O'Bryan
Email: smobtyan@stcloudstate.edu

IRB PROTOCOL DETERMINATION: Exempt Review

Project Title: Work-Related Stress and Coping Strategies for Elementary Teachers

Advisor: Kay Warner

The Institutional Review Board has reviewed your protocol to conduct research involving human subjects. Your project has been: **APPROVED**

Please note the following important information concerning IRB projects:

- The principal investigator assumes the responsibilities for the protection of participants in this project. Any adverse events must be reported to the IRB as soon as possible (ex. research related injuries, harmful outcomes, significant withdrawal of subject population, etc.).

- For expedited or full board review, the principal investigator must submit a Continuing Review/Final Report form in advance of the expiration date indicated on this letter to report conclusion of the research or request an extension.

- Exempt review only requires the submission of a Continuing Review/Final Report form in advance of the expiration date indicated in this letter if an extension of time is needed.

- Approved consent forms display the official IRB stamp which documents approval and expiration dates. If a renewal is requested and approved, new consent forms will be officially stamped and reflect the new approval and expiration dates.

- The principal investigator must seek approval for any changes to the study (ex. research design, consent process, survey/interview instruments, funding source, etc.). The IRB reserves the right to review the research at any time.

If we can be of further assistance, feel free to contact the IRB at 320-308-4932 or email ResearchNow@stcloudstate.edu and please reference the SCSU IRB number when corresponding.

IRB Chair:

Dr. Benjamin Witts
 Associate Professor- Applied Behavior Analysis
 Department of Community Psychology, Counseling, and Family Therapy

IRB Institutional Official:

Dr. Latha Ramakrishnan
 Interim Associate Provost for Research
 Dean of Graduate Studies

OFFICE USE ONLY

SCSU IRB# 1850 - 2369

1st Year Approval Date: 10/31/2018

1st Year Expiration Date:

Type: Exempt Review

2nd Year Approval Date:

2nd Year Expiration Date:

Today's Date: 11/1/2018

3rd Year Approval Date:

3rd Year Expiration Date:

Appendix F: Superintendent Support/Consent Form

September 24, 2018

Dear Superintendent _____:

This letter seeks to acquire consent and support from the school district to contact the K-5 classroom teachers in your district to participate in the study, **Work-Related Stress and Coping Strategies of Elementary Teachers**. The purpose of this research is to examine and identify work-related stressors, specific emotional and behavioral manifestations of work-related stressors, and coping strategies for work-related stress utilized by kindergarten through fifth grade classroom teachers. This study could benefit school administration, teacher preparation programs, and addressing work-related stress in teachers. As part of the research study, teachers will be asked to complete a “Teacher Stress Inventory” based on Dr. Michael Fimian’s **Teacher Stress Inventory**. Permission to use and modify the survey for this study has been approved by Dr. Fimian. The study is being conducted by Sonia O’Bryan, a doctoral candidate, from St. Cloud State University.

The survey is expected to take 5-10 minutes to complete and will be anonymous. The consent to participate form and survey will be sent to the principals to disseminate to the K-5 classroom teachers, once your letter of support and consent to participate is given. Data from the 19-question survey will be presented and reported in aggregated form. Minimal risks and discomforts to participate are anticipated and there are no personal or professional risks in participating. Participation in this study is voluntary, the decision to participate will not affect current or future relations with St. Cloud University, or the researcher. Participants are free to withdraw at any time without penalty. Results of the study can be requested from the primary investigator.

Thank you for your time and consideration. If you decide to show your support and give consent, please print off this form, sign, and scan it to smobryan@stcloudstate.edu. An electronic reminder will be sent one week from the original request.

Superintendent of Schools

School District name and number

Primary investigator, Sonia O’Bryan, can be contacted at: smobryan@stcloudstate.edu
Faculty advisor, Dr. K. Worner, can be contacted at ktworner@stcloudstate.edu.

Appendix G: Principal Permission to Participate Form

November 2, 2018

Dear Principal of District

Your superintendent, _____, has signed a letter of consent (attached) to contact you, the principal of _____ to seek your support in forwarding the link, (found at the top of this email), to your K-5 classroom teachers.

The link contains an invitation for your K-5 classroom teachers to participate in a research study, **Work-Related Stress and Coping Strategies of Elementary Teachers**. The purpose of this research is to examine work-related stressors, emotional and behavioral manifestation of work-related stressors, and coping strategies for work-related stress utilized by kindergarten through fifth grade classroom teachers.

The survey is expected to take 5-10 minutes and teacher participation is voluntary and anonymous. Data from the survey will be presented and reported in aggregated form. Minimal or no risks and discomforts for participants are anticipated and there are no personal or professional risks in participating. The decision to participate will not affect current or future relations with St. Cloud University, or the researcher. Participants are free to withdraw at any time without penalty. Results of the study can be requested from the primary investigator.

If you have any further questions about this research study, you can contact the primary investigator, Sonia O'Bryan at smobryan@stcloudstate.edu and/or faculty advisor, Dr. K. Worner at ktworner@stcloudstate.edu

Thank you for your willingness to show your support by forwarding the link to your K-5 classroom teachers. A reminder will be sent each week until enough data has been gathered. Please continue to forward the link each time it is sent.

Sonia O'Bryan

Appendix H: Teacher Consent to Participate Form

Teacher Stress Inventory

Consent to Participate

You are invited to participate in a research study about teacher stress and coping. The purpose of this research is to examine work-related stressors, emotional and behavioral manifestations of work-related stressors, and coping strategies for work-related stress.

The study will identify specific stressors and coping strategies used by kindergarten through fifth grade classroom teachers. The study results could benefit school administration, teacher preparation programs, and teachers.

As part of this study, you will be asked to complete a "Teacher Stress Inventory". The survey is expected to take 5-10 minutes to complete and will be anonymous. Data will be presented and reported in aggregated form. Minimal risks and discomforts to participate are anticipated.

Participation in this study is voluntary. Your decision to participate will not affect your current or future relations with St. Cloud University or the researcher. If you decide to participate, you are free to withdraw at any time without penalty.

If you have any questions about this study, you may contact the primary investigator, Sonia O'Bryan at smobryan@stcloudstate.edu and/or the faculty advisor, Dr. K. Worner at ktworner@stcloudstate.edu. Results of the study can be requested from the primary investigator.

Acceptance to Participate

By selecting "Yes" you indicate that you are least 18 years of age, you have read the information provided above, and you have consented to participate.

YES

NO

Appendix I: Teacher Stress Inventory Instrument

Teacher Stress Inventory (Permission granted by Michael Fimian)				
Instructions: This questionnaire is designed to gain a better understanding of what creates concern and/or stress for teachers in their work-related activities. Please indicate your opinion about each of the statements below by circling the appropriate number as it applies to stressors in your work.				
1 Not noticeable	2 Barely noticeable	3 Moderately noticeable	4 Very noticeable	5 Extremely noticeable
WORK-RELATED STRESSORS				
1. There is little time to prepare for my lessons / responsibilities.	1	2	3	4 5
2. There is too much work to do.	1	2	3	4 5
3. The pace of the school day is too fast.	1	2	3	4 5
4. My class is too big.	1	2	3	4 5
5. My personal priorities are being shortchanged due to time demands at work.	1	2	3	4 5
6. There is too much paperwork in my job.	1	2	3	4 5
7. There is a general lack of support for my job responsibilities.	1	2	3	4 5
8. Student behaviors negatively impact my ability to perform my job.	1	2	3	4 5
Instructions: Please indicate your opinion of the frequency of each of the statements below by circling the appropriate number as it applies to you in your work.				
1 Never	2 Rarely	3 Sometimes	4 Often	5 Always
EMOTIONAL MANIFESTATIONS OF WORK-RELATED STRESS				
9. I respond to stress by feeling insecure.	1	2	3	4 5
10. I respond to stress by feeling vulnerable.	1	2	3	4 5
11. I respond to stress by feeling unable to cope.	1	2	3	4 5
12. I respond to stress by feeling depressed.	1	2	3	4 5
13. I respond to stress by feeling anxious.	1	2	3	4 5
14. I respond to stress by feeling angry.	1	2	3	4 5
PHYSICAL MANIFESTATIONS OF WORK-RELATED STRESS				
15. I respond to stress by sleeping more than usual.	1	2	3	4 5
16. I respond to stress by procrastinating.	1	2	3	4 5
17. I respond to stress by becoming fatigued in a very short time.	1	2	3	4 5

18. I respond to stress with physical exhaustion.	1	2	3	4	5
19. There are days when I feel tired before I arrive at work.	1	2	3	4	5
20. I respond to stress by experiencing more illnesses (e.g. colds)	1	2	3	4	5
21. I respond to stress with physical weakness	1	2	3	4	5
STRATEGIES FOR COPING WITH WORK-RELATED STRESS					
Instructions: Rank the items below from 1-10 with 1= strategy used most and 10 = strategy used least to cope with work-related stress.					
<input type="checkbox"/> Entertainment (movies, plays, sporting events, hobbies, etc.) <input type="checkbox"/> Meditation/Mindfulness <input type="checkbox"/> Physical Activity (ex. running, yoga) <input type="checkbox"/> Alcohol <input type="checkbox"/> Administrator/Collegial Support <input type="checkbox"/> Personal and Family Relationships <input type="checkbox"/> Counseling <input type="checkbox"/> Food <input type="checkbox"/> Medication <input type="checkbox"/> Vacation					
Demographics-Years of Teaching Experience					
Please select the years of teaching which reflect your experience.					
<input type="checkbox"/> 1-5 years of teaching experience					
<input type="checkbox"/> 6-10 years of teaching experience					
<input type="checkbox"/> 11-15 years of teaching experience					
<input type="checkbox"/> 16+ years of teaching experience					