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Teachers' Stress, Anxiety, and Depression: What Are Special Education Teachers Experiencing?

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Teachers' Stress, Anxiety, and Depression: What Are Special Education Teachers Experiencing?

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Presented to the Faculty of the Graduate School of
Stephen F. Austin State University
In Partial Fulfillment
Of the Requirements

For the Degree of

Doctor of Philosophy

May 2021

Abstract

Research has shown that people in the teaching profession have high levels of stress and often report increased levels of symptoms of anxiety and depression. Students' academic progress may have adverse effects when their teachers have high stress levels or report mental distress. Those who teach special education often face high levels of stress. However, there is little research considering special education teachers' job-related health. This study collected data on 598 general and special education teachers in the United States. This study compared the endorsements of both stress and psychopathology between special education and general education teachers. This research found that both general and special education teachers demonstrate high levels of stress. However, special education teachers did have significantly higher levels stress. Interestingly, there was no difference in the levels of burnout between the two groups of teachers. High teaching-related stress levels predicted measured symptoms of anxiety and depression in both special and general education teachers. The special education teachers in this study did have higher rates of psychopathology diagnosis and symptoms. The perceived support and the respondents' quality of life were also considered. There was no significant difference between the groups, although the perceptions of support were significantly poor. Suggestions for possible improvement in teachers' mental health and stress include seeking to determine why special education teachers have a similar burnout rate as their counterparts and if the surface acting and deep acting reported by Yilmaz (2015) affect the rates of burnout.

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Chapter I

Introduction

Job-related stress can hurt an individual when it is more than she or he can handle. In particular, previous research has demonstrated that high-stress levels due to work demands are associated not only with symptoms of stress (Wiegner et al., 2015) but also psychopathology, including anxiety and depression (Cunha et al., 2016). Van Droogenbroeck and Spruyt (2015) indicated that teachers are a part of human service professions with high-stress levels. Some academic and governmental research indicates that teaching is among the most emotionally challenging jobs (Jones-Rincon & Howard, 2019; Klassen & Chiu, 2010; Kyriacou, 2001; McLean & Connor, 2015; Noor & Zainuddin, 2011; Nübling et al., 2011; Pithers, 1995; Pitsoe, 2013; Shapka & Perry, 2012; Stewart, 2018). Therefore, it is possible that a large number of teachers experience symptoms of anxiety and depression within their teaching profession.

Teachers who have high levels of stress or psychopathology may experience adverse effects impacting their students' academic progress. In this regard, teachers with high levels of stress, anxiety, and depression have been reported to have students with poor educational outcomes (Garrick et al., 2014). Research by Gray et al. (2017) found that learning outcomes are 8% lower in classes led by teachers with high levels of anxiety and depression

Psychopathology have been found to contribute to increased teacher burnout (Yu et al., 2015). The results of this burnout include teacher absences, lower levels of job satisfaction, and decreased effectiveness (Garrick et al., 2014; Gray et al., 2017; Seth, 2016). Research indicates that a significant number of experienced teachers are leaving the profession due to difficulties related to mental troubles (Clandinin et al., 2015; Nathaniel et al., 2016; Ryan et al., 2017; Skaalvik & Skaalvik, 2016). In short, the above referenced investigations have shown that several work-related factors impact the stress experienced by people and groups. The studies indicate that stress can lead to more serious mental disorders such as severe anxiety and depression. In this regard, special education teachers often experience and report more stress than general education teachers, given additional job expectations. Unfortunately, there is little research completed with special education teachers that considers job-related stress (Jones-Rincon & Howard, 2019).

Purpose of the Study and Research Questions

The purpose of this study is to describe the mental health status of special education teachers. Specifically, the current paper investigated (1) if special education teachers demonstrate higher levels of occupational stress than general education teachers and (2) if special education teachers also demonstrate higher levels of job-related burnout. This research also investigated (3) if special education teachers' physical and psychological demands significantly predict the rate of self-reported symptoms of anxiety and depression and (4) significantly predict the rate of those teachers indicating that they

have a formal diagnosis of anxiety and depression. This study considered (5) if special education teachers report that they perceive a lower level of mental health support than general education teachers. Finally, (6) the quality of life between these groups was compared for any significant differences between the two groups.

Significance of the Study

The current study helped determine if higher stress in special education teachers correlates with reports of psychopathology. Identifying levels and effects of stress on teachers may help school psychologists and administrators better comprehend the needs of this particular teacher population. Possible interventions and policy changes may, in turn, reduce teacher burnout and increase teacher retention rates as well as improvements of students' performance.

Chapter II

Literature Review

Mental Health Related Disorders

In the last three decades, epidemiological research shows that mental healthrelated disorders account for one-third of global disabilities (Vigo et al., 2016). Common mental disorders, including anxiety and depressive disorders, have become more important when viewed from the public health perspective due to their persistence and prevalence among populations (Besse et al., 2015; Jones-Rincon & Howard, 2019). Research conducted by the Anxiety and Depression Association of America (ADAA) reported that approximately 16.1 million people in 2015 who were 18 years or older had experienced a major depressive episode in the previous year (ADAA, 2018). Depression accounts for close to 50% of visits to mental health professionals as well as 12% of admissions in hospitals, as reported by Wang et al. (2017). According to the World Health Organization (WHO), depression currently affects about 300 million people (WHO, 2019) who often live with a disability (Wang et al., 2017). Based on a 2017 report on mental illnesses by the WHO, by 2015, there were an estimated 322 million people, or 4.4% of people, experiencing depression; this rate was a growth of 18.4% compared to a decade before. It is estimated that depression will be the second leading cause of disability-adjusted life years, a gauge of generic disease hardship, globally by 2020 (Besse et al., 2015).

Similarly, the global population affected by anxiety disorders was reported to be 264 million, a 14.9% increase from that of 2005, covering both age and population growth (WHO, 2017). In the American region, 7.7% of the female population is estimated to suffer from an anxiety disorder, while the male rate of suffering from an anxiety disorder is 3.6%. A research study conducted by Kessler et al. (2012) revealed that generalized anxiety disorder had a prevalence of 2.0% while separation anxiety had a prevalence of 1.2% in the United States. Similarly, Macrory reported a 2014 study in the UK, which found that 19.7% of the people at the age of 16 and older showed anxiety or depression symptoms. This rate was an increase of 1.5%, from what was recorded by the same institution in 2013. Females accounted for 22.5% and males 16.8% of this change (Macrory, 2016). In Australia, 26.3% of the population will experience anxiety disorders in their lifetime, as revealed in a report on Beyond Blue (2019). These statistics demonstrate the broad impact that depression and anxiety have on those in developed nations.

The WHO (2019) also reports that depression and anxiety can result from different factors such as psychological, environmental, biological, and genetic factors. For instance, environmental factors resulting in anxiety and depression include continuous exposure to abuse, neglect or violence, as well as stressful and traumatic experiences such as the loss of a loved one, financial challenges, and sexual abuse (Bystritsky et al., 2013; Iyer & Khan, 2012). Some of the common symptoms for a person experiencing depression and anxiety include restlessness, irritability or being

readily frustrated, always feeling nervous or sad, lacking sleep, or sleeping too much (Goodwin, 2015). Similarly, people with depression and anxiety disorders tend to under or overeat, feel tired and helpless or worthless, experience aches, and may contemplate committing suicide (Thomée et al., 2011).

Stress

According to the WHO (2005) defined *mental health* as the state in which individuals successfully cope with the everyday stresses of life, work productively, and contribute to their community. In the psychology literature, stress is defined as the way that individuals respond to any emotional threat or demand to their normal lives (Mark & Smith, 2012; Nakao, 2010; Rivera-Torres et al., 2013). In other words, stress is a mental and physical condition caused by internal and external factors that threaten the well-being of individuals, and it can occur when individuals try to adjust to these factors (Yu et al., 2015)

Stress is composed of physiological, psychological, and social components (Cooper & Travers, 2012). For example, people under stress may acquire different physical and behavioral habits such as picking or biting the nails, pacing up and down, and showing nervous twitches (Shonkoff & Garner, 2012). Stress can also cause changes in eating habits and sleep patterns causing detrimental effects in life-style (Cooper & Travers, 2012; Yau & Potenza, 2013). Stress is also associated with physiological states by acting on counter-regulatory hormones which can cause, for example, abdominal pain, cardiac conditions, obstetric difficulties, sickle cell crises, etc. (Horsch et al., 2016;

Nagatti et al., 2016; Scheffer et al., 2019). For instance, Konturek et al. (2011) found that excessive stress could lead to conditions of the gastrointestinal system such as gastroesophageal reflux disease, ulcers, dyspepsia, irritable bowel disease, and inflammatory bowel disease.

Overwhelming levels of stress are also correlated with the development of mental health disorders, such as depression and anxiety. For instance, Skipworth (2011) investigated the relationship between depression and perceived stress among college students. The study applied random sampling on 62,476 students from Arizona University to select a 20,000 student sample from which 2,238 participants were identified to give their responses. The study results indicated a statistically significant correlation between stress levels and perceived depression. Similarly, Sokratous et al. (2013) examined associations between depressive symptoms and stressful life events using data collected from college students. The sudden changes in a person's life, positive or not, are considered stressful life events. A checklist of events common to college students was used to determine the stress level experienced within the previous 12 months. The results indicated that the students' number of stressful life events was significantly associated with the number of clinical depressive symptoms endorsed by the students. This finding indicates that the more stressful events a student experienced, the more depressive symptoms the student will have. Gupta et al. (2018) also established the association between depression and psychological stress among medical students from Mangalore, Karnataka, India. The study applied a cross-sectional study on eligible

medical students. The authors utilized the Beck Depression Inventory scale and the General Health Questionnaire in collecting data associated with depression and psychological stress, respectively. The results of the study revealed a statistically significant association between depression and psychological stress factors. The reported rate of depression was very high, at 72.9%. The prevalence of stress was reported to be even higher, at 83.7%.

Moreira and Furegato (2013) examined depression and stress among nursing students' last semester to determine any associations between the two factors. The sample population of this research was 88 students from two nursing courses. The results of this study showed that stress was significantly related to moderate and severe signs of depression. Finally, Kurebayashi et al. (2012) conducted a study to examine correlations between anxiety and stress levels among nursing students. A correlation study design was applied to analyze the responses of 71 professional nurses. The resulting scores for both stress and anxiety levels were higher than similar studies. The results demonstrated a statistically significant correlation between stress and anxiety when using both trait and state anxiety scales, respectively. Although the levels of stress and anxiety were more significant than that of other studies, the correlation demonstrated through Kurebayashi et al. (2012) was similar to other studies. These results indicate that the correlation between stress and anxiety is the same whether the groups experience high or low stress levels.

Occupational Stress

Occupational stress is defined as the emotional, cognitive, behavioral, and physiological reaction to aversive and noxious aspects of work and work environments (Malik et al., 2017; Nakao, 2010; Song et al., 2017). Da Silva et al., 2015) also examined the association between occupational stress and depression. The study applied a cross-sectional study design to collect data from 310 nursing technicians. Questions related to psychological control at work and social support measured work stress. The study results revealed an overall rate of a self-reported depression diagnosis among the participants at 20%. Among those sampled who also experienced a high level of work stress, there was a depression rate of 35.2%. The authors also suggested the improvement of working conditions decrease the perception of work-related stress.

Song et al. (2017) examined the correlation between work related stress and depression, anxiety, as well as sleep. The study utilized a cross-sectional survey design to collect responses from a sample of 231 dentists. Correlational methods were applied to examine the data to establish the correlation between the different variables. The study results indicated that depression among the dentists correlated significantly with occupational stress. The authors found that working with non-compliant patients and patients with poor outcomes was a significant contributor to the dentists' depression. This factor is similar to other professions that invest emotional efforts to help people in need of support (Moreira & Furegato, 2013).

Similarly, Iliceto et al. (2013) completed a study of health professionals to explore the relationships between psychopathology and occupational stress. Self-report questionnaires were completed by 156 nurses and doctors seeking information on their experiences of workplace stress, temperament, and hopelessness. Their results found the causal variables of an external locus of control, a lack of Type A behavior, dissatisfaction with work, and mental and physical distress directly correlated with latent variable psychopathology (Iliceto et al., 2013). Shin and Kang (2011) used a self-report measure with 227 nurses to discover if a relationship existed between somatization, occupational stress, and emotional labor. Occupational stress was defined as role conflict, role overload, lack of skill, strain between co-workers, working night shifts, and inappropriate workplace treatment. Two structured self-report questionnaires were used to gather data about emotional and somatic perceptions for this descriptive research study. In short, the study results indicated that the nurses experienced high levels of work-related stress, which is related to burnout, somatization, high levels of absenteeism, alcoholism, and depression.

Occupational Stress and Psychopathology

Workers who report high levels of occupational stress also report higher levels of mental health disturbances. Research by Nakao (2010) indicated that occupational stress could lead to chronic anxiety and psychosomatic illnesses, depression, and suicidal ideation. This paper summarized two job stress models, the job demand-control-support model and the effort-reward imbalance model. In the job demand-control-support model

factors of the jobs expectations, the amount of autonomy workers have, and the amount of support the workers receive from their co-workers and supervisors. The effort-reward imbalance model considers the effort workers are required to give compared to the rewards of increased self-esteem and how effective the worker believes he or she can accomplish the job. Two studies were completed, and results were applied using the two models of inquiry. The job demand-control-support model did not demonstrate significant physiological concerns among the 396 male workers studied. However, there was an indication that mood was affected by job stress. In the second study, the effort-reward and imbalance model was utilized in a study of 95 male workers. Results demonstrated increased psychological fatigue among respondents with a higher level of over-commitment.

Faragher et al., (2013) conducted a meta-analysis of 485 studies related to job satisfaction and physical and mental health. Stress was a component in determining employees' level of job satisfaction. Mental health measures included factors of depression, anxiety, burnout, and self-esteem. These authors state that work-related stress can have negative impacts on the physical and mental health of workers. Mental health was found to be more significantly correlated to job satisfaction than physical health. The analysis found that a modest decrease in job satisfaction correlated to a clinically significant level of increase in employee psychopathology. The authors suggest that mental health providers should encourage clients with psychopathology to consider the impact work-related stress has on their mental health. This meta-analysis demonstrated

that the relationship between work and stress is critical for employers to ensure that workplace conditions enhance workers' well-being. Therefore, the literature supports Besse et al. (2015), who stated that workplace factors such as long-term stress and high job strain are associated with worker psychopathology that affects those workers' productivity. The symptoms of psychopathology can contribute to burnout, and higher rates of burnout are associated with prolonged levels of stress in the workplace (Jones-Rincon & Howard, 2019).

Stress can be experienced for many reasons other than work experiences. Some of these reasons result from experiencing one's life away from work, while other sources are inherited. Genetic predisposition was considered by Smoller (2016) in a review of research considering psychopathological conditions related to stress. Recent genetic findings in those with anxiety disorders, PTSD, and depression, classified as stress-related disorders, were discussed in the article, which also considered previous twin and other familial studies. The article found biologic and sociologic support for genetic contributions for each of the maladies considered (Smoller, 2016).

Another factor determined by birth that has been considered, along with stress experiences, is gender. Rivera-Torres et al. (2013) found that men in their study demonstrated that quantitative demands, such as working fast under time pressure, were the only factors causing job stress. However, women demonstrated that along with quantitative demands, qualitative factors, such as intellectual and emotional demands, also contributed to their work stress (Rivera-Torres et al., 2013). Hotel workers were the

participants in a study that considered the role of gender and job stressors and satisfaction (Kim et al., 2009). They reported that men experienced higher levels of stress; however, women had higher levels of adverse effects from the stress they experienced. Sokratous et al. (2013) found that the presence of clinically significant depressive symptoms was statistically higher in females than males included in their study.

The Teaching Profession

According to Churchill et al. (2013), teaching is a practice that results from the interaction of a teacher and a learner. Teaching is regarded to be effective once there is a relatively positive change in the learner's behavior. Parkay et al., (2010) argue that the primary goal of teaching is to educate the learners to make them better citizens in the future. MacBeath (2012) asserts that education is the process through which a learner is assisted to develop emotionally, spiritually, morally, mentally, and physically. By providing a conducive learning environment where learners gain new knowledge, skills, and attitudes to help them become useful to themselves and society at large, this development is achieved.

Development of the Teaching Profession

According to Avalos (2011), teaching fits the qualities of a profession and describes it as a professional occupation possessing economic, cultural, scientific, social, and technological dimensions. Avalos further explains that as a professional occupation, teachers go through formal training to gain knowledge to use in their practice. According to MacBeath (2012), the world is gradually changing while experiencing unpredictable

challenges in the 21st century, including environmental, social, and economic changes largely owed to globalization and technological advancements. This transition has increased demands from society on schools to prepare learners for rapid economic and social disruptions, the invention of new technologies, jobs that are yet to be created, and solving social problems not yet anticipated.

There is a need for continued professional development so that teachers are adaptable and able to respond effectively to changing demands in society. Kind (2014) stated that pre-service teacher training is not enough for enabling teachers to cope with the challenges they are likely to face in their career paths. As such, more is needed to ensure teachers are ready all the time. To respond to the changing demand, it is prudent to have well-educated and skilled teachers who will continue growing and developing professionally throughout their careers (Vizek-Vidović & Velkovski, 2013).

According to Sahlberg (2011), the value placed on the teaching profession varies from one country to the other. Many countries have failed to hold teaching with high regard due to the existence of other professions that they view as superior, forgetting that teachers are instrumental in the preparation of those professionals. Proper mechanisms to ensure effective learning, such as proper reforms, proper performance assessment methods, and adequate remuneration, should be offered to attract well-qualified teachers. The study reports that in Finland, teacher education programs admit only the brightest and the best students. Moreover, education is among the highly esteemed professions and

highly competitive when it comes to entry. Finnish teachers' level of compensation is intended to enhance student learning outcomes (Sahlberg, 2011).

Stress in the Teaching Profession

The teaching profession is regarded as both challenging and complex and requires high standards of commitment and professional standards. The importance of teachers having extensive subject knowledge, skills, and competencies to support and guide learning and understand the cultural and social educational dimension has been emphasized (Sharbain & Tan, 2012). Teachers are often required to understand the link between practice and research as well as facilitate the student's development of noncognitive and cognitive skills. They are also required to respond to individual student differences and produce equitable results in increasingly diverse classrooms and readily adapt to technological changes occurring in the classroom (MacBeath, 2012). Johnson et al. (2005) ranked 26 different occupations as they related to physical health, psychological well-being, and job satisfaction. The report listed six occupations that had higher than average negative scores on each of these three factors. These occupations included ambulance (EMT), teachers, social services workers, customer service call center workers, prison officers, and police. These jobs were noted to all involve emotional labor, which involves interpersonal interactions with others while maintaining professionally expected emotional expressions.

According to Pithers (1995), education is a highly stressful occupation for nearly a third of the people that work as teachers. The author's literature review related to

teachers and stress found that the studies vary in the meaning of stress. The factors that moderate teacher stress and the way these are studied is another concern Pithers expressed. Pithers also discussed problems of methodological issues such as the use of circular reasoning to research teacher stress and the effects of this stress on teachers. The study's findings imply that there is a need to understand the causes of stress among teachers to develop effective mitigation strategies that would improve the performance of teaching professionals.

Pei and Guoli (2007) also suggested that teaching is a highly stressful profession for teachers in their sample. Their results demonstrated that over 80 percent of surveyed teachers experienced moderate to heavy stress. The study determines that occupational stress negatively impacts elementary and secondary school teachers' health at a significant level. Adverse effects on the teachers' work were also significant; however, it was not as significant as the effects on the teachers' health. Their research found gender differences regarding the perception of stress among teachers, although other studies reviewed below contradict this finding (Klassen & Chiu, 2010; Noor & Zainuddin, 2011). Pei and Guoli also reported that stress levels of teachers with less than five years of experience were significantly higher than teachers with other ranges of experience.

Klassen and Chiu (2010) further recognized that teaching can be a stressful job.

These authors suggest that job stress lowers job satisfaction and the self-efficacy of teachers. Stress from student behavior was related to lower teacher efficacy. Stress from teacher workloads also correlated with greater overall stress. Female teachers have a

higher workload than their male counterparts, which contributes to the differences in the levels of overall stress experienced by female and male teachers. Rivera-Torres et al. (2013) offer insights into the causes of differences in stress levels experienced by men and women in the workplace. They suggest that intellectual and emotional demands directed toward female employees in the workplace lead to high-stress levels among female workers, reinforcing the findings of gender differences made by Klassen and Chiu (2010). The study finds that teachers experience stress in their area of work due to various occupational factors that negatively impact their well-being.

Noor and Zainuddin (2011) expanded on Klassen and Chiu's (2010) suggestion that family stressors contributed to the more significant work stress that female teachers experience in their instructional practice. Noor and Zainuddin (2011) looked at the relationship between emotional labor and the work-family conflict to determine these concepts' contributions to burnout. The authors explain emotional labor as the combination of surface acting (SA) and deep acting (DA) to present the emotions desired when working directly with people. SA is stated to be only changing one's expression of emotions, while DA includes the person attempting to change one's feelings to what they are expected to express. Reviewed research demonstrates that the experience of emotional labor is a reliable indicator of burnout due to emotional exhaustion in female teachers. The work-family conflict was studied to see if it was a mediator of emotional labor. These findings indicate that teachers may have burnout and psychopathology due

to their experiences of work-family conflict and emotional labor related to their work experience.

In another study of the relationship of emotional labor on burnout experienced by teachers, Yilmaz et al., (2015) found that teachers had lower levels of SA than DA. These findings contradict Noor and Zainuddin (2011), although Yilmaz et al. (2015) stated their findings were similar to studies they had reviewed. They also indicated that the deeper level of authentic emotional experience was a beneficial part of teachers' professionalism. They found that teachers' DA was a professional effort to match their emotions with their experience. However, the regulation of emotions can also hurt the psychological health of teachers in the long-term. Their findings also suggest that SA emotional labor among teachers increases burnout levels and, therefore, job-related stress.

McCarthy et al., (2009) also support findings that unresolved stress harms teachers' mental health. The study finds that burnout is a common stressor among elementary and secondary school teachers. The authors suggest that the workload handled by teachers is a significant cause of this burnout. The study also contends that emotional exhaustion is a common manifestation of the burnout experienced by teachers. The study concludes that schools' administrations must focus on reducing burnout among teachers to improve productivity.

Collie et al., (2012) examine the effect of teachers' judgments on the campus climate on which they work on stress, their productivity, and job satisfaction. The study

also considered the relationship between these three factors on each of the other measures. The authors report that teachers' perception of the workplace environment in their schools influences their stress experience. These teachers may lack job satisfaction because of the challenges experienced in the work environment. Stress related to poor students' behavior was also found to reduce teaching efficacy. The authors contend that highly stressed teachers may perceive their work environment as detrimental to their well-being. Lambert et al., (2015) researched teachers and stress. They found significant stress sources to include student behavior management, a sense of inadequacy, school organization and working conditions, salaries, and workload. The study highlighted different stress, including psychological, such as depression and anxiety; physiological including ulcers and cardiac issues; and behavioral like poor work performance. However, they stated that research with specific manifestations of stress from the teaching profession was rare.

Howard (Besse et al., 2015; Howard et al., 2017; Jones-Rincon & Howard, 2019) has participated in a series of research studies on the effects stress has on psychopathology in the teaching profession. Howard et al. (2017) indicate that administrators and other officials contribute to teachers' experience of stress due to expectations to improve factors over which the teachers have little to no influence. Besse et al. (2015) collected data from over 3000 teachers in Texas using the Perceived Stress Scale, The Short-Form (36) Health Inventory and the Patient Health Questionnaire, along with questions about current professional treatment for anxiety or depression. High levels

of stress were found to predict a provisional diagnosis of major depressive disorder significantly. Howard et al. (2017) used the collected data to consider teachers' somatization rates, a psychopathological condition in which there is no medical reason for multiple physical maladies. The teachers who met the criteria set for somatization disorder also indicated they experienced higher rates of perceived stress significantly higher than those who did not meet this criterion. Teachers who were considered to have somatization disorder also had high rates of other psychopathologies such as depression, anxiety, panic disorder, and anxiety disorder. Jones-Rincon and Howard (2019) later found that, similar to depression, the determination of anxiety was significantly related to high levels of stress.

Special Education Teachers

Special education teachers have a unique role with a wide variety of sources for stress in their work. This stress includes a wide diversity of student needs and abilities, growing expectations of students to demonstrate more excellent progress, large numbers of students for which he or she may be responsible, unmotivated students, and role ambiguity. Student discipline and challenging behaviors, including physical and verbal threats, is another stress factor that is often cited as is the large amounts of documentation and paperwork and a shortage of resources. Lack of administrative support is also often cited as a significant stress source for the special education teacher. These teachers can also experience frustration because of their desire to provide empathetic teaching, yet

they fail to realize the level of success for which they had hoped (Adeniyi et al., 2010; Billingsley & Cross, 1991; Stempien & Loeb, 2002).

Stempien and Loeb (2002) compared teachers of only general education students, special education teachers, and teachers who served both classifications of students together to determine if there was a difference in job satisfaction between general and special education teachers and what attributed to any differences found. The results demonstrated less job satisfaction, and thus higher levels of stress, in teachers of special education classes. Of the measured aspects of job satisfaction or dissatisfaction, feelings of frustration while teaching was the only factor found to be significantly correlated with unsatisfied special education teachers but not with unsatisfied general education teachers.

Adeniyi et al. (2010) completed a study to investigate additional specific sources of stress experienced by special education teachers. Their results demonstrated that several factors contributed to the stress endured by the special education teachers in their study. These causes include a lack of student progress, a high teacher workload, a shortage of assistance, and not enough specialized teachers for the students in mainstream settings. These teachers can also experience a type of psychological trauma that results in stress when they do not see the students for which they are responsible for making progress. This finding supports the research of Stempien and Loeb (2002) previously discussed. A greater severity of the pupils' needs a teacher serves can also contribute to more stress, as can students with multiple disabilities. Adeniyi et al. (2010) suggest this

may be due to the extra effort the teacher of special needs students provides to his or her responsibilities.

Kokkinos and Davazoglou (2009) studied the cause of job stress in 373 special education teachers with one to more than 11 years of teaching experience. It was reported that the special education teachers experienced moderate stress, an average reported work stress level of 5.05 out of 10. The stress was found to result from issues related to the progress and ability to meet student needs, safety, and social development of the students they served. The categories of student qualifications that were found to be a significant source of stress reported were teaching students with autism, followed by working with students with emotional and behavioral impediments. There was a correlation between reported levels of overall job stress and special education teachers' experience implementing the special education curriculum and the students' academic and social progress. There was also a correlation between teachers' levels of professional dissatisfaction and their perception of how stressful their job is (Kokkinos & Davazoglou, 2009).

Lazuras (2006) also researched the stress levels in special education teachers and compared this group with general education teachers. They also studied the relationships between special education teachers' stress, negative affect, and health results. Thirty-four special education teachers and 36 general education teachers completed Likert-scale format self-report questionnaires. Results demonstrated that special education teachers scored higher in all measures of stress and physical health symptoms than the general

education teachers. Organizational structures such as poor supervisory experiences, difficult tasks (how and what to do), and weak relationships with their colleagues were found to be the greatest source of stress for special education teachers. Stress was suggested to harm special education teachers' physical health (Lazuras, 2006).

Hamama et al., (2013) researched the associations between life satisfaction, affect, stress experiences in 125 special education teachers with one to 40 years of teaching experience using self-report questionnaires. They reported that the studied special education teachers who indicated they had higher harmful affect levels also indicated they experienced higher stress levels from teaching. Peer support was the only studied aspect that moderated the relationship between positive affect and stress, providing a coping mechanism when stressed; however, this did not ameliorate the experiences of negative affect (Hamama et al., 2013).

An indication of the greater challenges of teaching special education than general education was seen when teachers chose to stop teaching special education and continue teaching in the general education classroom. Billingsley and Cross (1991) studied this phenomenon in their research of 286 general education teachers who had previously taught special education using a questionnaire developed by the authors for this project. The results demonstrated that a lack of administrative support and stress resulting from working with students with a disability were the primary reasons teachers left the special education classroom yet continued to teach general education.

Rationale, Purpose, and Hypotheses

The psychological well-being of teachers is essential to the education system and the students they teach. This concern is enhanced for special education teachers since there are fewer special education teachers (Adeniyi et al., 2010; Billingsley & Cross, 1991; Lazuras, 2006; Stempien & Loeb, 2002) and their students may have increased needs and vulnerabilities related to their qualifying conditions. Overall, the aforementioned literature review suggest that higher levels of reported occupational stress are related to depression and anxiety development. Specifically, teachers who often report high levels of stress due to their occupational demands also demonstrate higher job-related burnout and more significant emotional regulation disturbances. Additional occupational expectations for special education teachers include a perception of less administrative support while having greater requirements for more specific planning and documentation requirements, a greater presence of physical and emotional attacks from their students, and a greater empathetic investment in their students' success.

The research proposes that the teachers' stress may contribute to the psychopathology they experience. The current research also demonstrates if teachers have significant stress levels in their occupation and if teachers of special education classes have an even greater level of stress. Therefore, it is possible that special education teachers may report higher levels of psychopathology, as shown through symptoms of anxiety and depression, than those in general education classes.

The purpose of the current research is to determine if special education teachers' stress levels predict the diagnosis of psychopathology and levels of anxiety and depression. It is hypothesized that (1) special education teachers will demonstrate higher levels of occupational stress than general education teachers; (2) special education teachers will, accordingly, also demonstrate higher levels of anxiety and depression as well as job-related burn out; (3) Among special education teachers, measures of physical and psychological demands (i.e., developing and monitoring student goals and objectives, modifying other teachers' lessons for individual students, and managing students with disruptive behavior) will significantly predict the rate of self-reported symptoms of anxiety and depression and (4) will significantly predict the rate of endorsement of formal diagnoses of anxiety and depression. It is further hypothesized that (5) special education teachers will report lower mental health support levels than general education teachers. The final hypothesis is that (6) there is no difference in the perceived quality of life between special education and general education teachers.

Chapter III

Methods

Participants

A total of 1,184 participants were recruited through one social media post on Facebook teacher forums. A link to the survey was posted to the group forums with a short invitation to participate in the survey on April 3, 2020. A copy of the social media invitation and a full list of the forums can be found in Appendices A and B. The link to the survey was closed on May 1, 2020. All the participants were self-reported current public school special education and general education teachers (separated as a comparison group) working with pre-kindergarten through 12th grade. Institutional Review Board approval was gained before recruiting the participants (Approval letter in Appendix C).

To increase the accuracy of the results, respondents whose surveys had not reached a value of responding to 100% of the 226 questions on a measure of progress tracked within the SPSS program (n = 561) were removed, resulting in a sample of 623 respondents. Moreover, respondents who took less than 10 minutes (n = 25) were removed, given that the average time to complete the survey was 31 minutes and respondents who took less than 10 minutes were found to be an outlier of the responding sample. This resulted in a final sample of 598 respondents. Special education teachers were 460 of the respondents with 138 general education teachers responding.

Materials

Demographics

Suitability for this study was determined by demographic information. The responding educators indicated their primary teaching assignments as either teaching special education or general education classes. These two groups were then used as comparison groups for this study.

Surveys

Participants completed several surveys. The respondents were informed and assured of the confidentiality of the information they share. The first survey collected demographic data. Other assessments included the Four-Dimensional Symptom Questionnaire (4DSQ), the Teacher Stress Inventory (TSI), the Teacher Burnout Scale (TBS), and the WHO Quality of Life, Short Form (WHOQOL-BREF). A set of questions assessed the support provided to teachers from their local education agency as well as what supports they would like to receive. A self-report question seeking if a current mental health diagnosis by a qualified clinician was also included.

The 4DSQ was developed by Terluin (2012) to determine the difference between clinical and typical distress in those assessed. It is a 50-item questionnaire with a five-point Likert-type scale used to determine levels of four different subscales: Distress, Depression, Anxiety, and Somatization. Permission to use this survey was granted through the Measurement Instrument Database for the Social Sciences (Terluin, 2012). Based on the last week before school closures due to the COVID-19, the respondent

answered "no," "sometimes," "regularly," "often," or "very often or constantly" to the various prompts. Both criterion and construct were found to be valid for the determination of distress, depression, anxiety, and somatization. Reliability of internal consistency was reported to be greater than 0.80 as measured by alpha coefficients (Terluin et al., 2006). A follow-up study reported that the 4DSQ remained a valid measure after being translated into the English language (Terluin et al., 2014).

The TSI is a research instrument developed by Fimian (1988) that assesses teacher job stress. The inventory has 49 items that measure ten components of stress in teachers in two subcategories. The subcategories consist of stress sources, including Time Management, Work-Related Stressors, Professional Distress, Discipline, and Professional Investment. The second subcategory considers manifestations of stress, including Emotional Manifestations, Fatigue Manifestations, Cardiovascular Manifestations, Gastronomic Manifestations, and Behavioral Manifestations. A Total Stress Score was derived from both of these sources. Construct, convergent, content, and external validity of the TSI were present in this measure. This instrument's reliability was reported to be present in its test-retest, alpha, split-half, and alternative measures (Fimian, 1988).

The TBS was developed by Seidman and Zager (1987) to measure teachers' burnout experience and help determine the significance of the problem. The TBS is a 21 item questionnaire with a six-point Likert-type scale that measures four factors: Career Satisfaction, Perceived Administrative Support, Coping with Job-Related Stress, and Attitudes Toward Students. The resulting scores are calculated by these scales rather than

the scale as a whole (Fulya & Mediha, 2009). Construct Validity, Predictive Validity, Internal Consistency, and Test-Retest Reliability were reported to be significant by Seidman and Zager (1987).

An assessment of the respondents' quality of life was made using the WHOQOL-BREF (Skevington et al., 2004), a 26 item measure that reduces the longer version's respondent inconvenience of the WHOQOL-100. These assessments are valid and reliable person-centered measures of well-being for use across cultures. WHOQOL-BREF responses resulted in four domain scores: physical, psychological, social, and the environment, as well as the overall quality of life score (Aigner et al., 2006; Skevington et al., 2004).

The survey asked teachers if they have a current depression or anxiety diagnosis to determine mental health awareness. The survey also asked respondents what, if any, treatment they are receiving if they do have a current diagnosis. Queries of what services or supportive activities the teachers have available to them from their campuses and districts provided an assessment of perceived mental health support. Which, if any, of these supports teachers have accessed was also be sought. Additional supports that would be considered helpful in the prevention and treatment of teacher mental illness were also surveyed.

Procedure

Data Collection

Participants were provided an informed consent, which required an electronic signature. This research did not collect personally identifiable data (i.e., name, address, contact information, etc.), including IP addresses. The data collection for this research was generated using the latest version of Qualtrics software.

Research Design

The current study used a quantitative research design and obtained the data via a survey procedure. Quantitative research was used to collect and analyze data which could then be generalized to wider populations. The survey procedure was a quantitative research method using self-reports using questionnaires.

Statistical analysis

IBM SPSS Statistics (version 27) predictive analytics software was used to analyze the data. Descriptive data was compiled first to determine the prevalence rates of each item. The rates of diagnosed mental illness, those who indicated clinical levels of distress on the 4DSQ, and those who demonstrated a significantly strong TSI total strength scale score (3.25 or above) were also determined.

Differences between special education and general education teachers who reported stress, burnout, and level of psychopathology were determined using Analyses of Variance. A 2 X 2 Chi-square analysis compared the rates of those who indicated a

diagnosed mental illness by type of teaching assignment (special v. general education).

An independent t-test compared the mental health support provided to teachers.

Chapter IV

Results

Statistical Assumptions Analyses

Statistical assumptions were tested to determine the appropriateness of parametric statistics for the data. Table 1 shows the results from the current samples on the 4DSQ, the TBS, the WHOQL-BREF, and the TSI. The 4DSQ measured self-reports of symptoms of Somatization, Anxiety, Depression, and Distress. The results demonstrated significant kurtosis on the Somatization (K = 4.914, SD = 200), Anxiety (K = 12.073, SD= 200), and Depression Scales (K = 15.268, SD = 200) due to high endorsement rates by the respondents in the sample on these measures. Some respondents had significantly elevated levels of depression and anxiety, factors considered in this study, and somatization, a factor not considered in this study, which resulted in the kurtosis. The TBS measured the sampled respondents' perceptions of factors that can contribute to teachers experiencing burnout. There was a negative skewness on the scales for Perceived Administrative Support and Coping with Job-Related Distress. The negative skew was likely due to low endorsements of factors that contributed to these two scales. The outliers contributing to this skew indicate that some respondents consider their administrators helpful, encouraging, and appreciative of their work.

Table 1

Statistical Assumptions Full Sample Data Univariate Standard Skewness Variable Mean (SE) Deviation (SE) Kurtosis (SE) outliers **4DSQ Somatization** 25.06 (0.36) 8.75 1.865 (.100) 4.91 (.200)* 6 **4DSQ** Anxiety 15.65 (0.22) 5.46 14 2.972 (.100) 12.07 (.200)* **4DSQ** Depression 7.73 (0.14) 3.51 3.548 (.100) 15.27 (.200)* 25 **4DSQ Distress** 31.67 (0.52) 12.82 1.298 (.100) 1.48 (.200) 0 TSI Professional Investment 2.03 (0.03) 0.84 0.57 (.100) -0.15 (.200) 0 TSI Behavioral Manifest. 1.67 (0.03) 0.72 1.21 (.100) 1.19 (.200) 0 TSI Time Management 3.31 (0.03) 0.63 -0.18 (.100) 0.06 (.200) 0 TSI Discipline and Motivation 2.78 (0.04) 0.99 0.22 (.100) -0.57 (.200) 0 TSI Emotional Manifestations 2.81 (0.04) 1.06 0.24(.100)-0.75 (.200) 0 TSI Work-Related Stress 3.47 (0.04) 0.87 -0.33 (.100) -0.48 (.200) 0 TSI Gastronomic Manifest. 1.87 (0.04) 1.02 0 1.21 (.1.00) 0.67(.200)TSI Cardiovascular Manifest. 2.23 (0.04) 1.07 .72 (.100) -0.28 (.200) 0 TSI Fatigue Manifestations 2.67 (0.04) 0.97 .43 (.100) -0.37 (.200) 0 **TSI Professional Distress** 2.94 (0.04) 0.98 .06 (.100) -0.70 (.200) 0 TSI Total Stress Score 2.61 (0.02) 0.6 .26 (.100) -0.10 (.200) 0 TSI Behavioral Manifest. 1.67 (0.03) 0.72 1.21 (.100) 1.19 (.200) 0 TSI Time Management 3.31 (0.03) 0.63 -0.18 (.100) 0.06 (.200) 0 TSI Discipline and Motivation 2.78 (0.04) 0.99 0.22 (.100) 0 -0.57 (.200)

Table 1 (cont.)

Tuble I (cont.)		Standard	Skewness		Univariate
Variable	Mean (SE)	Deviation	(SE)	Kurtosis (SE)	outliers
TSI Emotional					
Manifestations	2.81 (0.04)	1.06	0.24 (.100)	-0.75 (.200)	0
TSI Work-Related Stress	3.47 (0.04)	0.87	-0.33 (.100)	-0.48 (.200)	0
TSI Gastronomic Manifest.	1.87 (0.04)	1.02	1.21 (.1.00)	0.67 (.200)	0
TSI Cardiovascular Manifest.	2.23 (0.04)	1.07	.72 (.100)	-0.28 (.200)	0
TSI Fatigue Manifestations	2.67 (0.04)	0.97	.43 (.100)	-0.37 (.200)	0
TSI Professional Distress	2.94 (0.04)	0.98	.06 (.100)	-0.70 (.200)	0
TSI Total Stress Score	2.61 (0.02)	0.6	.26 (.100)	-0.10 (.200)	0
TBS Career Satisfaction	12.99 (0.13)	3.29	1.077 (.100)	2.01 (.200)	1
TBS Perceived Admin.					
Support	22.95 (0.14)	3.47	573 (.100)*	-0.17 (.200)	0
TBS Coping W/ Job Rltd.					
Distr.	19.98 (0.27)	6.56	065 (.100)*	-0.68 (.200)	0
TBS Attitude Toward					
Students	12.16 (0.09)	2.28	.144 (.100)	-0.13 (.200)	0
WHO Physical	68.88 (0.66)	16.15	-0.69 (.100)	0.30 (.200)	0
WHO Psychological	60.65 (0.71)	17.42	-0.58 (.100)	0.19 (.200)	0
WHO Social Relationships	65.76 (0.87)	21.37	-0.52 (.100)	-0.17 (.200)	0
WHO Environment	73.59 (0.58)	14.15	-0.67 (.100)	0.50 (.200)	0

* Indicates significant skewness and kurtosis of values greater than 3.

Note. 4DSQ = Four Dimensional Symptom Questionnaire; TBS = Teacher Burnout Scale; WHO = World Health Organization Quality of Life; TSI = Teacher Stress Inventory. SE = standard error.

Levels of Stress

A MANOVA was conducted to determine if there was a difference in stress manifestations measured by the TSI between special education and general education teachers. As shown in table 2, special education and general education respondents' responses on these scales demonstrated a significantly higher level of the manifestations of emotional experiences of stress and the digestive ailments related to stressful experience as measured by the TSI. The results were not significantly different on the manifestations of fatigue, heart complaints, or behaviors intended to relieve stress. The significance of the Wilks' Lambda test (p = .002) shows that as a model, special education teachers have more stress than general education teachers. This finding supports the first hypothesis that special education teachers demonstrate higher self-reported levels of occupational stress.

Table 2

Teacher Stress Inventory Manifestations and Special/General Education

Variable	Special Ed. Mean (SD)	General Ed. Mean (SD)	F Value	P Value
TSI Emotional Manifestation	2.85 (1.07)	2.65 (1.00)	3.93	0.048
TSI Fatigue Manifestation	2.69 (.98)	2.58 (.95)	1.32	0.251
TSI Cardio Manifestation	2.19 (1.06)	2.34 (1.11)	2.09	0.149
TSI Gastronomic Manifestation	1.92 (1.06)	1.70 (.88)	4.67	0.031
TSI Behavior Manifestation	1.70 (.72)	1.57 (.69)	3.12	0.078

Wilks' Lambda -- .969 Wilks' Lambda F Value (5, 592) 3.84 p =.002 *Note*. SD = standard deviation.

Teacher Burnout

A MANOVA was conducted to determine if special education and general education teachers demonstrated any variance in burnout levels, as demonstrated on the TBS. As shown in table 3, both groups of respondents indicate they have concerns with their perceptions of how well they can cope with the stress related to their job. The results did not demonstrate any significant difference between special and general education respondents' perceptions of factors leading to burnout. The TBS findings did not support the second hypothesis as there is no significant difference between the two groups of respondents in the level of job-related burnout. The measure of Career Satisfaction demonstrated a mildly elevated level of burnout, suggesting that the teachers are content with their work. However, a significant finding of this data analysis indicates that high levels of burnout are present for both groups of teachers in most areas measured by the TBS. This supports the findings of many previous studies. (Faragher et al., 2013; McCarthy et al., 2009; Noor & Zainuddin, 2011; Yilmaz et al., 2015; Yu et al., 2015).

Table 3Teacher Burnout Scale and Special/General Ed.

	Special Ed.	General Ed.		
Variable	Mean (SD)	Mean (SD)	F	P
TBS Career Satisfaction	12.90 (3.35)	13.24 (3.12)	1.15	0.284
TBS Perceived Admin. Support	22.91 (3.59)	23.10 (3.02)	0.33	0.567
TBS Coping w/ Job Related Distress	20.10 (6.69)	19.54 (6.08)	0.77	0.380
TBS Attitude Toward Students	12.23 (2.32)	11.93 (2.13)	1.85	0.174

Wilks' Lambda --.988 Wilks' Lambda F Value (4, 593) 1.78 p = 0.131

Note. SD = standard deviation. The cutoff value indicating high burnout levels are Career Satisfaction > 15, Perceived Admin Support > 18, Coping with Job-Related Distress > 18, and Attitude Toward Students > 12.

Psychopathology Symptoms

A MANOVA was conducted to determine if there was a difference between self-reported psychopathology symptoms between special education and general education respondents. The results, shown in table 4, indicated no significance on reported psychopathology symptoms, as measured by the 4DSQ, between the two groups of respondent teachers. The responses provided did demonstrate that teachers in both special and general education had strongly elevated scores on all four of the 4DSQ subgroups.

Table 4Four-Dimensional Symptom Questionnaire and Special/General Ed.

	Special Ed. Mean	General Ed.	
Variable	(SD)	Mean (SD)	F Value P Value
4DSQ Somatization	25.30 (8.81)	24.26 (8.51)	1.49 0.223
4DSQ Anxiety	15.80 (5.83)	15.16 (3.95)	1.44 0.231
4DSQ Depression	7.82 (3.72)	7.45 (2.68)	1.17 0.280
4DSQ Distress	32.12 (13.13)	30.15 (11.63)	2.5 0.114

Wilks' Lambda --.996 Wilks' Lambda F Value (4, 592) 0.644 p=0.63 Note. SD = standard deviation. Cutoff values indicating a strongly elevated score are: Somatization > 20, Anxiety > 12, Depression > 5, and Distress > 20.

Psychopathology Diagnosis

Difference Between Special and General Education Teachers

Analysis of the data demonstrated that 32.2% of special education respondents compared to 23.2% of general education respondents have been formally diagnosed with depression or anxiety in the past year with a χ^2 value (1) 4.07 degree of p-value =.04. This result supports the hypothesis that special education teachers do have higher levels of a formal diagnosis of psychopathology than general education teachers.

Prediction of Special Education Psychopathology

A linear regression was conducted to relate positive indications of anxiety on the 4DSQ with stress sources' TSI measures. These results are seen in table 5. This analysis did significantly demonstrate that stress sources did predict expressions of anxiety (p < 0.002). Time management and professional investment, such as contributing their personal opinions and perceived lack of opportunity for improvement, were the most significant variables predicting anxiety. Issues such as classroom management, the view

that students do not put forth a good effort, and other discipline and motivation measures also contributed slightly to the likelihood of anxiety.

Table 5

Regression Analysis Summary for Special Education Teachers
Responding with Self-reported Anxiety Symptoms as Predicted by
TSI Sources of Stress

Variable	В	SE	β	t	р
TSI Stress Source	3.53	1.14		3.09	0.002
Time management	2.03	0.4	0.23	5.04	0.000
Work-related stressors	0.12	0.31	0.02	0.39	0.697
Professional distress	0.24	0.29	0.04	0.84	0.401
Discipline and motivation	0.54	0.24	0.1	2.24	0.025
Professional investment	1.2	0.35	0.18	3.45	0.001

Note. R^2 adjusted = 0.19. B = unstandardized beta; SE = standard error; β = standardized beta; t = t-test; p = significance.

A second linear regression was conducted comparing the special education teachers' endorsement of depression symptoms compared to these teachers' sources of stress as shown in table 6. The extent of work-related stressors did significantly predict the self-endorsement of depressive feelings (p=0.005). Professional distress such as lack of advancement opportunities, a sense of a lack of recognition, and a need for more status and respect also predicted depression, demonstrated by the Total Stress Score (p=0.008). Depression was not found to be indicated by the aggregate of the answers provided for a measure deriving a total stress score. However, some physical and psychological demands did significantly predict the rate of self-reported symptoms of depression.

Table 6Regression Analysis Summary for Special Education Teachers Responding with Self-reported Depression Symptoms as Predicted by TSI Sources of Stress

Variable	В	SE	β	t	p
TSI Stress Source	1.24	0.75		1.65	0.100
Time management	0.48	0.27	0.09	1.65	0.073
Work-related stressors	0.58	0.21	0.14	2.84	0.005
Professional distress	0.50	0.19	0.20	2.64	0.008
Discipline and motivation	0.13	0.16	0.04	0.83	0.410
Professional investment	0.46	0.23	0.11	2.01	0.045

Note: R^2 adjusted = 0.40. B = unstandardized beta; SE = standard error; β = standardized beta; t = t-test; p = significance.

The rate of diagnosis of anxiety or depression by a professional was also compared to the TSI sources of stress. This regression, whose results are shown in table 7, did demonstrate the predictability of a formal diagnosis of psychopathology in the sample of special education respondents at a significant level (p < .001). Measures of professional investment (p = .003) and time management (p = .004) were the most significant factors predicting a mental health diagnosis. Work related stressors also predicted clinical diagnosis of psychopathology at a higher rate of significance (p = 0.049).

Table 7

Regression Analysis Summary for Special Education Teachers responding they had been professionally diagnosed with Anxiety or Depression in the past year as predicted by TSI Sources of Stress

Variable	В	SE	β	t	p
TSI Stress Source	2.03	0.13		16.14	0.000
Time management	-0.13	0.04	-0.16	-2.91	0.004
Work-related stressors	0.07	0.03	0.12	1.98	0.049
Professional distress	0.02	0.03	0.04	0.63	0.529
Discipline and motivation	0.01	0.03	0.02	0.41	0.683
Professional investment	-0.11	0.04	-0.20	-3.00	0.003

Note: R^2 adjusted = 0.05. B = unstandardized beta; SE = standard error; β = standardized beta; t = t-test; p = significance

Perceived Support

An independent t-test was used to analyze the special education respondents' answers to questions of mental health support provided by their schools. (M=0.05, SD=0.10) compared to the general education respondents' answers (M=0.04, SD=0.10). The results demonstrated no significant difference in the two groups' perceptions of support, t (596), p=0.151. This result does not support the hypothesis that special education teachers perceive a lower level of support than general education teachers.

Quality of Life

Finally, the teachers' quality of life was measured through the WHO Quality of Life Scales. The respondents' perceptions of their physical, psychological, social, and environmental aspects of their lives were assessed. The analysis of the two groups of respondents demonstrated no significant differences in the teachers' perceived quality of life. These findings supported the final hypothesis that the measure of perceived quality of life amongst the two groups of teachers would have no difference

Table 8

WHO Quality of Life Scales and Special/General Ed.

	Special Ed.	General Ed.		
Variable	Mean (SD)	Mean (SD)	F Value	P Value
WHO Physical	15.10 (2.63)	15.44 (2.42)	1.83	0.18
WHO Psychological	13.70 (2.77)	13.73 (2.86)	0.02	0.89
WHO Social	14.51 (3.47)	14.57 (3.24)	0.04	0.85
WHO Environment	15.74 (2.28)	15.90 (2.23)	0.54	0.46
WHO Physical	69.39 (16.44)	71.51 (15.11)	1.83	0.18
WHO Psychological	60.60 (17.30)	60.84 (17.86)	0.02	0.89
WHO Social	65.67 (21.72)	66.06 (20.23)	0.04	0.85
WHO Environment	73.36 (14.23)	74.37 (13.95)	0.54	0.46

Wilks' Lambda --.995 Wilks' Lambda F Value (4, 593) 0.81 p=0.523 *Note*. SD = standard deviation.

Chapter V

Discussion

The teaching profession is often related to high levels of stress due to the job demands. Special education teachers, specifically, often report high job demands, given that they work with the most vulnerable students, and thus are expected to have higher levels of stress. The current study compared the levels of stress between special education and general education teachers. It was hypothesized that (1) special education teachers would demonstrate higher levels of work-related stress (2) more job-related burnout (3) higher self-reported indicators of psychopathology and (4) greater number of formal diagnoses of anxiety and depression than general educator teachers. This study also hypothesized that 5) special education teachers would report lower perceived mental health support levels and (6) lower quality of life than general education teachers.

The results of the current study suggest that both special and general education teachers experience considerable levels of stress. Moreover, significant differences in the manifestation of stress between special education teachers and general education teachers were found. Specifically, special education teachers tend to have greater emotional and gastrointestinal manifestations compared to general education teachers. Teachers also demonstrate high rates of psychopathologies, such as depression and anxiety. A large number of the responding teachers indicated they had been professionally diagnosed with these disorders. However, the results of this research demonstrate a notably higher rate of

psychopathology among special education teachers. Interestingly, while manifesting more significant stress and psychopathology indicators, the present research suggests special education teachers do not experience burnout levels greater than general education teachers. The high levels of stress and psychopathology correlated to high levels of burnout as demonstrated by the resulting scores on the TBS. A cutoff score of 18, as established by Seidman and Zager (1987), indicates increased levels on the TBS scale for Coping with Job Related Distress. The research did not support the expected difference in the school system's level of support between the two groups. However, the support of the school did relate to the burnout that teachers experience.

The two groups of teachers also did not show a difference in their quality of life. Interestingly, both groups of teachers were also shown to be content with their work as teachers and did not indicate this was related to burnout. Special education teachers reported a greater number of depression and anxiety diagnoses than general education teachers. However, these groups did not significantly differ in symptoms reported on the 4SDQ. It is important to note that the 4SDQ classified these groups as very stressed, given that both groups' mean values are higher than the cutoffs suggested by the author (Terluin, 2012). These findings support previous studies that have found that more than 30% of teachers experience significant stress levels (Kyriacou, 2001; Pithers, 1995). The emotional labor that teachers are providing when serving their students may be contributing to the stress experienced by the teachers (Johnson et al., 2005; Noor and Zainuddin, 2011; Yilmaz et al., 2015). The significant level of Emotional Manifestation on the TSI endorsed by the

respondents in the current study further supports the previous findings. The high workload placed on teachers may also be contributing to the elevated stress levels of special education teachers (Klassen & Chiu, 2010; Lambert et al., 2015). This was reflected in the current research by the significant psychopathology, especially depression, indicated by the special education respondents high rate of Work Related Stress. This supports Besse et al. (2015) who found that stress and high job strain are correlated to workers' depression which can contribute to burnout.

The current study demonstrated that issues of time management, including being overcommitted, having little time to relax, and thinking of matters not related to teaching, demonstrate some of the ways that special education teachers' personal lives may be contributing to the stress they are experiencing. This finding supports previous research that the family obligations teachers, especially female teachers, have contribute to their stress experience (Klassen & Chiu, 2010; Noor & Zainuddin, 2011). The campus climate may be another factor leading to the demonstrated levels of stress teachers have (Collie et al. 2012; Lambert et al., 2015). The current research supports the research by Howard et al. (2017) that administrative expectations and a lack of input toward those expectations may also be contributing to the poor campus climates. Respondents teaching special education indicated that these factors contribute to factors resulting in the TSI Professional Investment and Professional Distress.

These findings are similar to previous research by Nakao (2010) that indicated mood disorders such as anxiety and depression could be impacted by the job demand-

control-support model when workers did not have a sense of control over high work demands. A second study reported in the same article indicated that the effort-reward and imbalance model demonstrated higher levels of psychological fatigue in respondents who indicated they were overcommitted in their work. These issues relate to the Professional Investment, Work-Related Stressors, and Time Management categories of the TSI used in the current study. These categories were shown to predict a professional diagnosis of psychopathology as well as indications of anxiety and depression in special education teachers on the 4DSQ. The present research supported Faragher et al. (2013) who found that even a small decrease in job satisfaction was related to significant levels of employee psychopathology in their meta-analysis of research of job satisfaction compared to reports of job satisfaction as well as physical and mental health. Likewise, the measure of Professional Distress on the TSI used for the current research demonstrated that dissatisfaction with job related factors such as low salaries, lack of promotion opportunities, and a feelings of a lack of respect predicted depression among special education teachers. These findings support research that Howard found in two (Besse et al., 2015; Jones-Rincon & Howard, 2019) research projects that reported on the impacts of stress on Texas teachers' mental health.

Similarly, the current study found that categories from the TSI including Time Management, Work-Related Stressors, Professional Distress, Professional Investment, and the Total Stress Source were predictive of depressive symptoms and/or a diagnosis of anxiety or depression in special education teachers. Jones-Rincon and Howard (2019)

reported a comparison of anxiety disorder in the same Texas teachers to indications of perceived stress on the PSS. They reported that teachers were more likely to meet criteria for an Anxiety Disorder on the PHQ if they had higher levels of perceived stress on the PSS. The current study found similar results with special education teachers who had indications of anxiety or reported a diagnosis of anxiety or depression was predicted by the TSI factors of Time Management, Work Related Stressors, Discipline and Motivation, Professional Investment, and the Total Stress Source.

To further investigate the role of stress in psychological and work outcomes, the current study also tested whether teacher's stress would predict endorsement of self-reported psychopathology symptoms experienced by these teachers. Specifically, in special education teachers, time management, discipline and motivation, work-related stressors, and professional distress significantly predicted higher levels of depression and/or anxiety. These results indicate that the relationship between sources of stress and psychopathology in special teachers is very strong. Previous research show that people in professions with high stress and also have psychopathologies are at a greater risk for somatization disorders or the development of physiological problems. Konturek et al. (2011) reviewed the effects of stress on some of the general diseases of the gastrointestinal (GI) tract. They found a contribution of stress to upper GI tract disorders such as gastroesophageal reflux disease, peptic ulcers, and inflammatory bowel disease. The impact of stress on disorders of the lower GI tract such as irritable bowel syndrome was also discussed. It was reported that stress alters the GI-motility, visceral sensitivity,

an increase in the permeability of the intestines, and the release of pro-inflammatory mediators due to the activation of mast cells. Jackson et al. (2010) considered data from the Americans' Changing Life Survey to compare the relationship between stress and unhealthy behaviors. Their research found subjects who had high levels of stress demonstrated large levels of obesity and smoking which may contribute to an early death.

A study of the relationship between psychopathology, medication, and stress was conducted by Bergdahl and Bergdahl (2002). To determine the possibility of psychopathology they administered the Beck Depression Inventory and the State and Trait Anxiety Inventory. The use of over the counter and prescription medication was collected through self-reported measure. Stress was measured with the Perceived Stress Questionnaire. They reported that the use of psychotropic medication, such as antidepressants, was related to high stress levels. They also warned that service providers should remain cognizant of a related risk of suicidal behavior related to high levels of stress.

Importantly, the current study found that in special educators, stress manifestation significantly predicted a positive diagnosis of depression and anxiety. In specific, special education teachers who reported not having the time to complete tasks, needing to do more than one thing at a time, and being overcommitted to work duties were more likely to also report that they have been formally diagnosed with a psychopathology. This finding supports previous research. The research of Adeniyi et al. (2010) aimed to survey the observed causes of work stress in special education teachers in Nigeria. There were

50 responding special education teachers who completed an adapted form of the Job Stress Inventory by Akinboye with the collection of demographic and informational data.

Work related stress, similar to the same category on the TSI used in the current study, was reported to be related to an extreme level of stress. Issues of emotional exhaustion was found to correlate with moderate stress levels. Moderate stress levels were also related to the teachers' sense of personal accomplishments, which is similar to Professional Distress on the TSI. Measures related to the effects of the severity of student disabilities found that students with significant disabilities or more than one disability demonstrated extreme stress levels for the teachers. Moderate levels of stress were associated with working with difficult students and students with a low degree of disability.

A study by Kokkinos and Davazoglou (2009) of special education teachers in Greece assessed the levels of stress and its apparent causes and the relationship to professional characteristics. The authors created an assessment of circumstances and occupational experiences that may result in special education teachers stress. The results demonstrated that collectively monitoring and managing the behaviors of their students and the teachers' own sense of professional competence were the issues resulting in the greatest stress for these special education teachers. These factors relate to items in the categories of Discipline and Motivation and Emotional Manifestations on the TSI. The research also considered 10 common qualifications for special education services, the teachers' perceived level of work-related stress, and demographic and professional data.

Over half of the respondents indicated that teaching students with autism creates major stress. Teaching students with behavior or emotional difficulties and those with ADHD were reported to cause stress in over a third of the surveyed teachers. In another study from Greece, Lazuras (2006) surveyed 70 teachers with five occupational measures. The author found that special education teachers did perceive higher levels of stress related to the organizational factors of teaching. This factor is similar to the measure of work-related stress on the TSI which was significantly elevated amongst special education teachers in this study.

Yilmaz et al, (2015) considered the relationship between occupational stress, negative states of mind associated to work, and health results. On items of occupational stress, which most closely aligns with the Professional Investment scale on the TSI, special education teachers demonstrated significantly higher scores when compared to general education teachers. The only factor the special education teachers ranked lower on was on the measure of negative emotions while at work even though this group had significantly more stress than general education teachers. The authors suggested a possible reason for this is that the special education teachers employ DA, changing their emotions to better match the demands of their work. The presence of somatic concerns could be predicted in those with interpersonal discord at work and having a large workload. The later finding is similar to the current studies finding that stress sources predict psychopathology in special education teachers.

Implications

Factors contributing to stress in Special Education Teachers may include time management issues and the duties related to teaching special education. Special education teachers in the current study indicated that their sources of stress included issues related to their professionalism. Professional issues such as personal investment and time management and increased duties may intensify perceived stress by special education teachers. Other issues, such as student discipline and student academic motivation may also affect special education teachers' levels of stress.

The current research indicates that time management contributes to the perception of stress by special education teachers. Häfner et al., (2014) report that time management affects workers' perception of stress. Administrators may want to facilitate time for special education teachers to collaborate with general education teachers and perform the additional tasks required of them. Steps to clarify the roles of special education teachers in the provision of academic supports and instruction would also benefit the special education teachers in their specialized role. This includes the participation of special education teachers in the development of their role to improve their ability to manage their time more efficiently (Vlachou et al., Didaskalou and Kontofryou, 2015). The teachers in the present study indicated concerns related to not being able to contribute their professional opinions. Sahlberg (2011) has previously reported that a teacher's sense of value boosts overall productivity and satisfaction.

While including these teachers more in the educational process is essential, increased participation in instructional duties should not result in more overall duties for these teachers who indicated that time management is a significant source of stress. Vlachou et al, (2015) found that special education teachers have several additional duties than most general education teachers. These duties include the assessment of progress and identification of special education student needs. Special education teachers' additional tasks beyond those general education teachers include writing and updating IEP goals and objectives based on additional assessments these teachers must administer to support these goals. Vlachou et al also found that planning and providing specialized instruction for students needing special education are other additional duties of special education teachers. There is a larger amount of planning differentiated instruction, often of the same lesson material, to meet several student's different needs. Special education teachers are also often required to teach students in several grades and subjects, sometimes within the same class period. Another task is monitoring students' progress in inclusion classes that the special education teacher does not teach. An additional planning or conference period for special education teachers could relieve some of the stress realized from the other duties they must perform. Also limiting the different number of different classes and subjects for which these teachers are responsible would improve their ability to manage their time effectively. Providing enough well-trained paraprofessionals to provide student interventions and supports under the special

education teacher's supervision could also relieve the stress experiences of these specialized teachers.

Special education teachers in this research also showed a lack of feeling recognized and respected as a professional. District, state, and national leaders do not often elicit their professional contributions to policies that affect these teachers in the classroom. For teachers to feel more valued involves feeling supported in their work by the public and school officials (Collie et al., 2012; Nübling et al., 2011). The current study demonstrated that special education teachers perceive a lack of value. A lack of opportunity for professional improvement contributes to a sense of not being valued. Examples of this improvement could be learning new or more effective ways to teach or becoming an administrator for all students. Another measure of value that teachers do not perceive are wages indicative of their professional investment.

The present research did not find a significant difference in burnout issues between Special Education and General Education Teachers. Similar measures of burnout in special education teachers while experiencing higher stress levels than general education teachers are notable discrepancies from previous findings that higher levels of stress contribute to greater burnout (Steinhardt et al., 2011; Yu et al., 2015). The emotional investment that special education teachers provide their students may be greater due to the required focus of individual support for students with disabilities. This possibility is supported through the research of SA and DA by Yilmaz et al. (2015) which

suggested that a greater level of emotional involvement is supportive of a teacher's effectiveness.

Greater access to interventions for stress and psychopathology would also be a benefit for all teachers. A 2019 review by von der Embse, Ryan, Gibbs, and Mankin found that interventions including behavioral, cognitive-behavioral and mindfulness approaches provided to teachers can ameliorate teacher stress. Access to clinical intervention for the teachers from professionals trained in special education teachers specific challenges could also be beneficial.

Limitations and Future Studies

There are limitations to the current study that should be considered. Social media use to recruit participants may have resulted in lower participation rates from teachers who are not thoroughly familiar with technological means of communication, perhaps older teachers. The length of the survey may have deterred some possible participants. The average time for completion of this survey was over 30 minutes. This is longer than the 20-minute maximum ideal time length reported by Revilla and Ochoa (2017). A large portion of respondents who did not complete the full survey, resulting in the responses they did provide not being considered. The use of self-report surveys contributes to a possible limitation. Kyriacou (2001) indicated that self-report measures might be overused in assessments of teachers' stress experiences. There was a question of professional clinical diagnosis included in the present survey to address this possible weakness; however, that was also self-reported. The current study did not consider the

teachers' race. It has been demonstrated that race can influence stress and major depression (Jackson et al., 2010)

There are several opportunities to continue research indicated by these findings. Studying teachers who have been clinically diagnosed with anxiety or depression who are not experiencing such psychopathologies' current manifestations may benefit the teaching field. Having an understanding of successful interventions would allow for the replication of these treatments. Also, studies of the two groups of teachers may show meaningful insights into the special education teachers' professional issues, resulting in high-stress levels that may be different from general education teachers.

Considering factors that may be limiting special education teachers' elevation to administration may improve the level of support special education teachers experience. Studying the population of those administrators at the campus, district, and state levels who do have a background in special education and are working for all students, rather than solely special education students, with administrators who have little experience serving special education students is another possible area of research. Such studies may reveal results contributing to explaining the lack of support perceived by special education teachers.

Seeking an understanding of the significantly higher levels of stress special education teachers' reported experiencing while not demonstrating indications of greater burnout levels or decreased sense of their quality of life may provide insights to support all teachers. Further research into the level of SA and DA by Yilmaz et al. (2015) may

contribute to how personal levels of emotional investment may be affecting the wellbeing of all teachers. Consideration of career choices of special education teachers could demonstrate ways that these teachers manage their feelings of stress. Billingsley and Cross (1991) studied teachers who moved from teaching special education to general education because of their stress experienced in the special education classroom. It may also be that these teachers endeavor to serve students by providing other special education services such as becoming a diagnostician or LSSP. Determination of factors such as this may provide insight into the difference in expected burnout rates for special education teachers. The factors resulting in special education teachers' ability to remain in the classroom while experiencing higher stress levels could be studied further in later research.

Conclusion

Teaching is a career choice made by highly qualified people who have a desire to help children. Both special and general education teachers have participated in professional training requiring a college degree and certification. This research demonstrates that special education teachers often have higher stress levels and psychopathology diagnoses than their general education colleagues. However, the rate of burnout was found to be the same between the two groups. Recognition of the effects of their chosen career is needed to provide support to teachers, especially special education teachers, without placing a stigma on mental health issues and psychopathology that is a result of the service they have decided to provide to the future of society.

References

- Adeniyi, S. O., Fakolade, O. A., & Adeyinka, T. (2010). Perceived causes of job stress among special educators in selected special and integrated schools in Nigeria.

 *NewHorizons in Education, 58(2), 73-82.
- Aigner, M., Forster-Streffleur, S., Prause, W., Freidl, M., Weiss, M., & Bach, M. (2006).

 What does the WHOQOL-BREF measure? Measurement overlap between quality of life and depressive symptomatology in chronic somatoform pain disorder.

 *Psychiatry & Psychiatric Epidemiology, 41(1), 81-86.

 https://doi.org/10.1007/s00127-005-0997-8
- Anxiety and Depression Association of America (2018). Understanding the Facts:

 Depression. Retrieved from https://adaa.org/understanding-anxiety/depression
- Avalos, B. (2011). Teacher professional development in teaching and teacher education over ten years. *Teaching and Teacher Education*, 27(1), 10-20.
- Ballet, K., Kelchtermans, G., & Loughran, J. (2006). Beyond intensification towards a scholarship of practice: analyzing changes in teachers' work lives. *Teachers and Teaching: Theory and Practice*, 12(2), 209-229. https://doi.org/10.1080/13450600500467415

- Berding, J. (2015). John Dewey. In *The Routledge International Handbook of Philosophies and Theories of Early Childhood Education and Care* (pp. 73-80).
- Bergdahl, J., & Bergdahl, M. (2002). Perceived stress in adults: Prevalence and association of depression, anxiety and medication in a Swedish population. *Stress and Health*, 18, 235-241. https://doi.org/10.1002/smi.946
- Besse, R., Howard, K., Gonzalez, S., & Howard, J. (2015). Major depressive disorder and public school teachers: Evaluating occupational and health predictors and outcomes. *Journal of Applied Biobehavioral Research*, 20(2), 71-83.
- Beyond Blue. (2019). *Australian Depression and Anxiety Statistics*. Retrieved April 16, 2019, from https://www.beyondblue.org.au/media/statistics
- Billingsley, B. S., & Cross, L. H. (1991). Predictors of commitment, job satisfaction, and intent to stay in teaching: A comparison of general and special educators. *The Journal of Special Education*, 25(4), 453-471.
- Buchanan, J., Prescott, A., Schuck, S., Aubusson, P., Burke, P., & Louviere, J. (2013).

 Teacher retention and attrition: Views of early career teachers. *Australian Journal of Teacher Education*, 38(3), 112-129. https://doi.org/10.14221/ajte.2013v38n3.9
- Bystritsky, A., Khalsa, S. S., Cameron, M. E., & Schiffman, J. (2013). Current diagnosis and treatment of anxiety disorders. *Pharmacy and Therapeutics*, *38*(1), 30.

- Churchill, R., Godinho, S., Johnson, N. F., Keddie, A., Letts, W., Lowe, K., ... & Shaw, K. (2013). *Teaching: Making A Difference*. John Wiley & Sons Australia.
- Clandinin, D. J., Long, J., Schaefer, L., Downey, C. A., Steeves, P., Pinnegar, E., ... & Wnuk, S. (2015). Early career teacher attrition: Intentions of teachers beginning. *Teaching Education*, 26(1), 1-16.
- Collie, R. J., Shapka, J. D., & Perry, N. E. (2012). School climate and social-emotional learning: Predicting teacher stress, job satisfaction, and teaching efficacy. *Journal of Educational Psychology*, 104(4), 1189.
- Cooper, C., & Travers, C. (2012). Teachers Under Pressure: Stress in the Teaching Profession. Routledge.
- Cunha, M., Ribeiro, A., & André, S. (2016). Anxiety, depression and stress in patients with rheumatoid arthritis. *Procedia-Social and Behavioral Sciences*, 217, 337-343.
- Da Silva Gherardi-Donato, E. C., Cardoso, L., Teixeira, C. A. B., de Souza Pereira, S., & Reisdorfer, E. (2015). Association between depression and work stress in nursing professionals with technical education level. *Revista Latino-Americana de Enfermagem*, 23(4), 733.

- Den-Brok, P., Wubbels, T., & Van-Tartwijk, J. (2017). Exploring beginning teachers' attrition in the Netherlands. *Teachers and Teaching*, 23(8), 881-895.
- Faragher, E. B., Cass, M., & Cooper, C. L. (2013). The relationship between job satisfaction and health: a meta-analysis. In *From Stress to Wellbeing Volume*1 (pp. 254-271). Palgrave Macmillan, London.
- Fimian, M. J. (1988). Teacher Stress Inventory. Retrieved February 9, 2019, from http://www.instructionaltech.net/TSI/
- Fisher, M. H. (2011). Factors influencing stress, burnout, and retention of secondary teachers. *Current Issues in Education*, *14*(1).
- Fulya, C. O., & Mediha, S. (2009). The quality of school life and burnout as predictors of subjective well-being among teachers. *Educational Sciences: Theory and Practice*, 9(3), 1223-1235.
- Garrick, A., Winwood, P. C., Mak, A. S., Cathcart, S., & Bakker, A. B. (2014).

 Prevalence and organizational factors of psychological injury among Australian school teachers. *Australian Journal of Organization Psychology*, 7(5), 1-12. https://doi.org/10.1017/orp.2014.5
- Goodwin, G. M. (2015). The overlap between anxiety, depression, and obsessive-compulsive disorder. *Dialogues in Clinical Neuroscience*, 17(3), 249.

- Gray, C., Wilcox, G., & Nordstokke, D. (2017). Teacher mental health, school climate, inclusive education and student learning: A review. *Canadian Psychology*, 58(3), 203-210. https://doi.org/0708-5591/17/\$12.00
- Gupta, A., Salunkhe, L. R., Hameed, S., & Halappanavar, A. B. (2018). Study of association between psychological stress and depression among medical students in Mangalore. *International Journal of Community Medicine and Public* Health, 5(10), 4398-4402.
- Häfner, A., Stock, A., Pinneker, L., and Ströhle, S. (2014). Stress prevention through a time management training intervention: An experimental study. *Educational Psychology*, *34*(3), 403-416. https://doi.org/10.1080/01443410.2013.785065
- Hamama, L., Ronen, T., Shachar, K., & Rosenbaum, M. (2013). Links between stress, positive and negative affect, and life satisfaction among teachers in special education schools. *Journal of Happiness Studies*, *14*(3), 731-751. https://doi.org/10.1007/s10902-012-9352-4
- Horsch, A., Kang, J. S., Vial, Y., Ehlert, U., Borghini, A., Marques-Vidal, P., ... & Puder,
 J. J. (2016). Stress exposure and psychological stress responses are related to
 glucose concentrations during pregnancy. *British Journal of Health Psychology*, 21(3), 712-729.

- Howard, K., Haskard-Zolnierek, K., Johnson, A., Roming, S., Price, R., & Cobos, B. (2017). Somatization disorder and stress in teachers: A comprehensive occupational health evaluation. *Journal of Applied Behavioral Research*, 22:e12105. https://doi.org/10.1111/jabr.12105
- Iliceto, P., Pompili, M., Spencer-Thomas, S., Ferracuti, S., Erbuto, D., Lester, D., ... & Girardi, P. (2013). Occupational stress and psychopathology in health professionals: an explorative study with the multiple indicators multiple causes (MIMIC) model approach. *Stress*, *16*(2), 143-152.
- Iyer, K., & Khan, Z. A. (2012). Review paper depression—A review. *Research Journal of Recent Sciences*, ISSN, 2277, 2502.
- Jackson, J. S., Knight, K. M., & Rafferty, J. A. (2010). Race and unhealthy behaviors: chronic stress, the HPA axis, and physical and mental health disparities over the life course. *American Journal of Public Health*, 100(5), 933-939.
- 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. https://doi.org/10.1108/02683940510579803
- Jones-Rincon, A., & Howard, K. J. (2019). Anxiety in the workplace: A comprehensive occupational health evaluation of anxiety disorder in public school teachers.

Journal of Applied Behavioral Research, 24(12133), 1-12. https://doi.org/10.1111/jabr.12133

- Kessler, R. C., Petukhova, M., Sampson, N. A., Zaslavsky, A. M., & Wittchen, H. U. (2012). Twelve-month and lifetime prevalence and lifetime morbid risk of anxiety and mood disorders in the United States. *International Journal of Methods in Psychiatric Research*, 21(3), 169-184.
- Kim, B. P., Murrmann, S. K., & Lee, G. (2009). Moderating effects of gender and organizational level between role stress and job satisfaction among hotel employees. *International Journal of Hospitality Management*, 28(4), 612-619.
- Kind, V. (2014). A degree is not enough: A quantitative study of aspects of pre-service science teachers' chemistry content knowledge. *International Journal of Science Education*, 36(8), 1313-1345.
- Klassen, R. M., & Chiu, M. M. (2010). Effects on teachers' self-efficacy and job satisfaction: Teacher gender, years of experience, and job stress. *Journal of Educational Psychology*, 102(3), 741.
- Kokkinos, C. M., & Davazoglou, A. M. (2009). Special education teachers under stress: Evidence from a Greek national study. *Educational Psychology*, 29(4), 407-424. https://doi.org/10.1080/01443410902971492

- Konturek, P. C., Brzozowski, T., & Konturek, S. J. (2011). Stress and the gut:

 Pathophysiology, clinical consequences, diagnostic approach and treatment options. *Journal of Physiology and Pharmacology*, 62(6), 591-599
- Kurebayashi, L. F. S., Do Prado, J. M., & Da Silva, M. J. P. (2012). Correlations between stress and anxiety levels in nursing students. *Journal of Nursing Education and Practice*, 2(3), 128.
- Kyriacou, C. (2001). Teacher stress: Directions for future research. *Educational Review*, 53(1), 27-35. https://doi.org/10.1080/00131910120033628
- Lambert, R. G., McCarthy, C. J., Fitchett, P. G., Lineback, S., & Reiser, J. (2015).

 Identification of elementary teachers' risk for stress and vocational concerns using the national schools and staffing survey. *Education Policy Analysis Archives*, 23, 43.
- Lazuras, R. S. (2006). *Stress and Emotion: A New Synthesis*. New York: Springer Publishing Company.
- Lehavot, K., & Simoni, J. M. (2011). The impact of minority stress on mental health and substance use among sexual minority women. *Journal of Consulting and Clinical Psychology*, 79(2), 159-170. https://doi.org/10.1037/a0022839

- Linden, W. (1984). Development and initial validation of a life event scale for students.

 Canadian Counselor, 18(3), 106-108.
- MacBeath, J. (2012). Future of Teaching Profession. Brussels: Education International.
- Macrory, I. (2016). Measuring National Well-Being: Life in the UK, 2016. *Office for National Statistics* [Web page]. Retrieved October 21, 2020 from //www.ons.gov.uk/peoplepopulationandcommunity/wellbeing/articles/measuringn ationalwellbeing/2016
- Malik, N. A. A., Björkqvist, K., & Österman, K. (2017). Factors associated with occupational stress among university teachers in Pakistan and Finland. *Journal of Educational, Health and Community Psychology*, 6(2), 1-14.
- Mark, G., & Smith, A. P. (2012). Occupational stress, job characteristics, coping, and the mental health of nurses. *British Journal of Health Psychology*, *17*(3), 505-521.
- McCarthy, C. J., Lambert, R. G., O'Donnell, M., & Melendres, L. T. (2009). The relation of elementary teachers' and coping resources to burnout symptoms. *The Elementary School Journal*, 109(3), 282-300. https://doi.org/10.1086/592308
- McLean, L., & Connor, C. M. (2015). Depressive symptoms in third-grade teachers:

 Relations to classroom quality and student achievement. *Child Development*,

 86(3), 945-954. https://doi.org/10.1111/cdev.12344

- Moreira, D. P., & Furegato, A. R. F. (2013). Stress and depression among students of the last semester in two nursing courses. *Revista Latino-Americana de Enfermagem*, 21(SPE), 155-162.
- Nagatti, D., Anina, D., Daigle, M., & O'Brien, K. M. (2016). Physiological and social stress on cognitive performance. UMass Center for Clinical and Translational Science Retreat. 57. Retrieved May31,2019,

 https://escholarship.umassmed.edu%2Fcts_retreat%2F2016%2Fposters%2F57&utm_mediu_m=PDF&utm_campaign=PDFCoverPages
- Nakao, M. (2010). Work-related stress and psychosomatic medicine. *BioPsychoSocial Medicine*, 4(4), 1-8.
- Nathaniel, P., Sandilos, L. E., Pendergast, L., & Mankin, A. (2016). Teacher stress, teaching-efficacy, and job satisfaction in response to test-based educational accountability policies. *Learning and Individual Differences*, 50, 308-317.
- Noor, N. M., & Zainuddin, M. (2011). Emotional labor and burnout among female teachers: Work–family conflict as mediator. *Asian Journal of Social Psychology*, *14*(4), 283-293.

- Nübling, M., Vomstein, M., Haug, A., Nübling, T., & Adiwidjaja, A. (2011). European-wide survey on teachers work related stress-assessment, comparison and evaluation of the impact of psychosocial hazards on teachers at their workplace. *Brussels: European Trade Union Committee for Education*.
- Parkay, F. W., Stanford, B. H., & Gougeon, T. D. (2010). *Becoming A Teacher* (pp. 432-462). Pearson/Merrill.
- Pei, W., & Guoli, Z. (2007). Survey of occupational stress of secondary and elementary school teachers and the lessons learned. *Chinese Education & Society*, 40(5), 32-39.
- Pithers, R. T. (1995). Teacher stress research: Problems and progress. *British Journal of Educational Psychology*, 65(4), 387-392.
- Pitsoe, V. J. (2013). Teacher attrition in South Africa: Trends, challenges and prospects. *Journal of Social Sciences*, *36*(3), 309-318.
- Rapee, R. M. (2012). Family factors in the development and management of anxiety disorders. *Clinical Child and Family Psychology Review*, *15*(1), 69-80.
- Revilla, M. & Ochoa, C. (2017). Ideal and maximum length for a web survey.

 International Journal of Market Research, 59(5), 557-565.

 https://doi.org/10.2501/IJMR-2017-039

- Rivera-Torres, P., Araque-Padilla, R. A., & Montero-Simó, M. J. (2013). Job stress across gender: the importance of emotional and intellectual demands and social support in women. *International Journal of Environmental Research and Public Health*, 10(1), 375-389.
- Ryan, S. V., Nathaniel, P., Pendergast, L. L., Saeki, E., Segool, N., & Schwing, S.
 (2017). Leaving the teaching profession: The role of teacher stress and educational accountability policies on turnover intent. *Teaching and Teacher Education*, 66, 1-11.
- Sahlberg, P. (2011). The professional educator: Lessons from Finland. *American Educator*, *35*(2), 34-38.
- Scheffer, M., Becker, J., de Azeredo, L. A., Grassi-Oliveira, R., & de Almeida, R. M. M. (2019). Subjective and physiological stress measurement in a multiple sclerosis sample and the relation with executive functions performance. *Journal of Neural Transmission*, 1-10.
- Seidman, S. A., & Zager, J. (1987). The Teacher Burnout Scale. *Educational Research Quarterly*, 11(1), 26-33.

- Seth, A. (2016). Study of mental health and burnout in relation to teacher effectiveness among secondary school teachers. *Indian Journal of Health and Wellbeing*, 7(7), 769-773.
- Sharbain, I. H. A., & Tan, K. E. (2012). Pre-service teachers' level of competence and their attitudes towards the teaching profession. *Asian Journal of Social Sciences* & *Humanities*, 1(3), 14-22.
- Shin, M. K., & Kang, H. L. (2011). Effects of emotional labor and occupational stress on somatization in nurses. *Journal of Korean Academy of Nursing*Administration, 17(2), 158-167.
- Shonkoff, J. P., & Garner, A. S. (2012). The lifelong effects of early childhood adversity and toxic stress. *Pediatrics*, *129*(1), e232-e246.
- Skaalvik, E. M., & Skaalvik, S. (2016). Teacher stress and teacher self-efficacy as predictors of engagement, emotional exhaustion, and motivation to leave the teaching profession. *Creative Education*, 7(13), 1785-1799.
- Skevington, S. M., Lofty, M., & O'Connell, K. A. (2004). The World Health
 Organization's WHOQOL-BREF quality of life assessment: Psychometric
 properties and results of the international field trial. A report from the WHOQOL
 group. *Quality of Life Research*, 13, 299-310.

- Skipworth, K. (2011). Relationship Between Perceived Stress and Depression in College Students (Doctoral dissertation, Arizona State University).
- Smoller, J. W. (2016). The genetics of stress-related disorders: PTSD, depression, and anxiety disorders. *Neuropsychopharmacology*, *41*(1), 297.
- Sokratous, S., Merkouris, A., Middleton, N., & Karanikola, M. (2013). The association between stressful life events and depressive symptoms among Cypriot university students: a cross-sectional descriptive correlational study. *BMC Public Health*, *13*, 1121. https://doi.org/10.1186/1471-2458-13-1121
- Song, K. W., Choi, W. S., Jee, H. J., Yuh, C. S., Kim, Y. K., Kim, L., ... Cho, C. H. (2017). Correlation of occupational stress with depression, anxiety, and sleep in Korean dentists: cross-sectional study. *BMC Psychiatry*, *17*(1), 398. https://doi.org/10.1186/s12888-017-1568-8
- Steinhardt, M. A., Jaggars, S. E. S., Faulk, K. E., & Gloria, C. T. (2011). Chronic work stress and depressive symptoms: Assessing the mediating role of teacher burnout. *Stress and Health*, 27(5), 420-429.
- Stempien, L. R., & Loeb, R. C. (2002). Differences in job satisfaction between general education and special education teachers: Implications for retention. *Remedial*

and Special Education, 23(5), 258-267. https://doi.org/10.1177/07419325020230050101

- Stewart, V. (2018). New Challenges and Opportunities Facing the Teaching Profession in Public Education. Asia Society 2018 International Summit on the Teaching Profession. Retrieved April 14, 2019 from https://istp2019.fi/documents/10810921/10916646/ISTP+2018/51533a10-6f43-3f46-1a1b-200aaa080b97/ISTP+2018.pdf
- Sutcher, L., Darling-Hammond, L., & Carver-Thomas, D. (2016). A coming crisis in teaching? Teacher supply, demand, and shortages in the US. *Learning Policy Institute*.
- Terluin, B. (2012). Four-Dimensional Symptom Questionnaire (4DSQ). Measurement Instrument Database for the Social Science. Retrieved June 25, 2018 from https://dx.doi.org/10.13072/midss.167
- Terluin, B., Smits, N., & Miedema, B. (2014). The English version of the Four-Dimensional Symptom Questionnaire (4DSQ) measures the same as the original Dutch questionnaire: A validation study. *The European Journal of General Practice*, 20(4), 320-326. https://doi.org/10.3109/13814788.2014.905286

- Terluin, B., van Marwijk, H. A., W., Ader, H. J., de Vet, H. C., Penninx, B. W. J.,
 Herrmens, M. L. van Boeijen, C., van Balkom, A. J. L.M., van der Klink, J. J.L.,
 & Stalman, W. A. (2006). The Four-Dimensional Symptom Questionaire (4DSQ):
 A validation study of a multidimensional self-report questionnaire to assess
 distress, depression, anxiety and somatization. *BMC Psychiatry*, 22, 6-34.
 https://doi.org/10.1186/1471-244X-6-34
- Thomée, S., Härenstam, A., & Hagberg, M. (2011). Mobile phone use and stress, sleep disturbances, and symptoms of depression among young adults-a prospective cohort study. *BMC Public Health*, *11*(1), 66.
- Van Droogenbroeck, F., & Spruyt, B. (2015). Do teachers have worse mental health?

 Review of the existing comparative research and results from the Belgian Health

 Interview Survey. *Teaching and Teacher Education*, 51, 88-100.

 https://doi.org/10.1016/j.tate.2015.06.006
- Vigo, D., Thornicroft, G., & Atun, R. (2016). Estimating the true global burden of mental illness. *The Lancet Psychiatry*, 3(2), 171-178.
- Vizek-Vidović, V., & Velkovski, Z. (2013). Teaching Profession for the 21st Century:

 Advancing Teacher Professionalism for Inclusive, Quality and Relevant

 Education. *Belgrade: Centre for Education Policy*.

- Vlachou, A., Didaskalou, E., & Kontofryou, M. (2015). Roles, duties and challenges of special/support education: Implications for promoting inclusive practices.
 European Journal of Special Education, 30(4), 551-564.
 https://doi.org/10.1080/08856257.2015.1060073
- von der Embse, N., Ryan, S. V., Gibbs, T, Mankin, A. (2019). Teacher stress interventions: A systematic review. *Psychology in the Schools*, *56*, 1328-1343. https://doi.org/10.1002/pits.22279
- Wang, J., Wu, X., Lai, W., Long, E., Zhang, X., Li, W., ... Lin, H. (2017). Prevalence of depression and depressive symptoms among outpatients: a systematic review and meta-analysis. *BMJ Open*, 7(8), e017173. https://doi.org/10.1136/bmjopen-2017-017173
- Wiegner, L., Hange, D., Björkelund, C., & Ahlborg, G. (2015). Prevalence of perceived stress and associations to symptoms of exhaustion, depression and anxiety in a working age population seeking primary care-an observational study. *BMC Family Practice*, 16(1), 38.
- Wikman, U. (2010). *Teacher Education Policy in Europe: Quality in Teacher Education*.

 Retrieved April 16, 2019 from https://core.ac.uk/download/pdf/35126096.pdf

- World Health Organization. (2005). *Promoting Mental Health: Concepts, Emerging Evidence, Practice*. Retrieved January 12, 2020 from https://www.who.int/mental_health/evidence/MH_Promotion_Book.pdf
 www.who.int/mental_health/evidence/MH_Promotion_Book.pdf
- World Health Organization. (2017). Depression and Other Common Mental Disorders:

 Global Health Estimates. Retrieved January 12, 2020

 https://apps.who.int/iris/bitstream/handle/10665/254610/WHO-MSD-MER-2017.2-eng.pdf?sequence=1
- World Health Organization. (2019). *Depression: Key Facts*. Retrieved January 12, 2020 https://www.who.int/news-room/fact-sheets/detail/depression
- Yau, Y. H., & Potenza, M. N. (2013). Stress and eating behaviors. *Minerva Endocrinologica*, 38(3), 255.
- Yilmaz, K., Altinkurt, Y., Guner, M., & Sen, B. (2015). The relationship between teachers' emotional labor and burnout level. *Eurasian Journal of Educational Research*, *59*, 75-90.
- Yu, X., Wang, P., Zhai, X., Dai, H., & Yang, Q. (2015). The effect of work stress on job burnout among teachers: The mediating role of self-efficacy. *Social Indicators Research*, 122(3), 701-708.

Appendix A

Social Media Invitation

Are you a teacher for the 2019/2020 school year? Please participate in my study! I am pursuing my Ph.D. in School Psychology at Stephen F. Austin State University. I need both special education and general education teachers to complete the questionnaire. *Please forward this to all of your teaching partners, colleagues, and friends!!* During this time of COVID Stay-at-Home, this can be something different in your day. Ready? Follow the link -v-v-v-v-

Appendix B

Facebook Forums

HISD TEACHER GROUP Lucky 2nd Grade Teachers

WeAreTeachers HELPLINE The Resource Room

Special Education Self-Contained Setting SPED ahead

Middle School Art Teachers Fabulous Fourth Grade Teachers

Not So Wimpy Third Grade Teachers

Special Education Teachers

Teachers of Rhode Island Missouri Teachers Take A Stand

VA Public School Teachers & Substitutes Teaching in Texas!

Oklahoma Teachers Support Group Texas Teachers Teaching Third

Arkansas Teachers 911 North Dakota Teachers

Georgia Teachers Collaboration Special Education Teachers (Severe)

Hawaii Teachers Forum Florida for Teachers and Education

Wyoming Teachers Illinois Teachers

New Hampshire Teachers Autism Classroom Resources' Special

Educators Connection

South Dakota Council of Teachers of

Mathematics Texas Special Education Teachers

Mississippi Parent and Teacher Advisory Special Education Teachers Unite!

North Carolina Teachers Houston Teachers in Need

Fabulous Firsties: First Grade Teachers

Teacher/Educator Resources and Jobs in

Group Arizona

Voice of Oklahoma Teachers Special Education/IEP Support Group Nebraska Art Teachers Association Pennsylvania Teachers SC Parents and Teachers for Education New Jersey Teacher Network – Social & **Professional Group** Special Education Teachers of Georgia Teacher Educators in Special Education Montana Science Teachers General Education, Special Education, and Mental Health in NY/NJ/CT Seesaw Teachers: Special Education Teachers of New York City **Breezy Special Ed Insiders** The Teachers' Lounge – Houston & East Texas Teachers Surrounding Areas Special Education Teachers: Embracing The Special Educators – Special Teachers Journey Alaska Science Teachers Special Education Teachers of Hawaii California Teachers Empowerment Network Middle & High School Math Teachers Kansas Association of Teachers of Texans for Public Education Mathematics (Texans4PublicEd @Texans4E) K-5th Resource Teachers Group Maine Teachers **Secondary Resource Teachers** Texas Teachers 3rd-5th Grade Delaware teachers **Empowering AR Teachers**

Special Educators

Appendix C

IRB Approval

STEPHEN F. AUSTIN STATE



UNIVERSITY

Institutional Review Board for the Protection of Human Subjects in

Research

P.O. Box 13019, SFA Station • Nacogdoches, Texas 75962-3046Phone (936) 468-1153 • Fax (936) 468-1573

Principal Investigator: Luis Aguerrevere

Human Services

aguerrevle@sfasu.edu

Co-investigators: James Potter (potterjh@jacks.sfasu.edu)

RE: Project Title "Teachers' stress, anxiety, and depression: what are special

education teachers experiencing?" Case # AY2020-1171

TYPE OF RESEARCH: Dissertation

FROM: James D, Schaeffer, IRB

DATE: March, 20, 2020

I would like to thank you for submitting your project entitled "Teachers' stress, anxiety, and depression: what are special education teachers experiencing?" to the IRB for review. It has been reviewed and has been **Approved** based on the following criteria:

45 CFR 46.104 (d)(2): Research that only includes interaction involving the use of educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures or observation of public behavior (including visual or auditory recording) if at least one of the following is met: (1) Information obtained is recorded by the investigator in such a manner that the identity of human subjects cannot be readily ascertained, directly or through identifiers linked to the subjects: or (2) Any disclosure of the human subjects' responses outside of the research would not reasonably place the subjects at risk of criminal or civil liability or be damaging to the subjects' financial standing. employability, educational advancement, or reputation or; (3) The information obtained is recorded by the investigator in such a manner that the identity of the human subjects can be readily ascertained. directly or through identifiers linked to the subjects, and an IRB conducts a limited IRB review to make the determination required by 45 CFR 46.111(a)(7). Children may only be included in research under this exemption when involving educational tests or observation of public behavior if the investigator(s) do not participate in the activities being observed and the information obtained is recorded by the investigator in such a manner that the identity of the human subjects cannot be readily ascertained directly, or through identifiers linked to the subjects.

Your project has approval through March 20, 2021 should you need additional time to complete the study you will need to apply for an extension prior to that date. The IRB should be notified of any planned changes in the procedures during the approval period, as additional review will be required by the IRB, prior to implementing any changes, except when changes are necessary to eliminate immediate hazards to the research participants. The researcher is also responsible forpromptly notifying the IRB of any unanticipated or adverse events involving risk or harm to participants or others as a result of the research.

All future correspondence regarding this project should include the case

number AY2020-1171

Appendix D

Demographics Survey

Please complete the following demographic questions.
Did you serve as a special education teacher for all of the 2018-19 school year?
○ Yes
○ No
Age
O 20-24
O 25-29
O 30-34
O 35-39
O 40-44
O 45-49
O 50-54
O 55-5960-64
O 65 or over
Gender
O Male
○ Female
O Identify in other way
O Prefer not to answer

Number of years teaching
\bigcirc 1
O 2-4
O 5-9
O 10-14
O 15-19
O 20-24
O 25-29
○ 30-34
○ 35-39
O 40-44
○ 45 or more
Highest degree earned
○ B.A.
O M.A., M.Ed.
○ E.D., Ph.D.
Primary teaching level for 2017/18 school year
○ РК-К
O 1-2
○ 3-5
O 6-8
O 9-12

What is your yearly salary as a special education teacher?
O Less than \$20,000
O \$20,000 - \$30,000
O \$30,000 - \$40,000
O \$40,000 - \$50,000
O \$50,000 - \$60,000
○ \$60,000 or more
What is your total household yearly income?
O Less than \$20,000
S20,000 - \$30,000
S30,000 - \$40,000
S40,000 - \$50,000
S50,000 - \$60,000
S60,000 - \$70,000
S70,000 - \$80,000
S80,000 - \$90,000
S90,000 - \$100,000
S100,000 - \$110,000
S110,000 - \$120,000
S120,000 - \$130,000
S130,000 - \$140,000
S140,000 - \$150,000
\$150,000 - \$160,000

\$160,000 or more								
What is your marital status?								
O Single - never married								
O Married								
O Divorced								
Separated								
O Widowed								
O Committed								

Appendix E

Four-Dimensional Symptom Questionnaire

The following is a list of questions about various complaints and symptoms you may have. Each question refers to the complaints and symptoms that you had **in the past** week (the past 7 days, including today). Complaints you had before then, but no longer had during the past week, do not count. Please indicate for each complaint how often you noticed that you had it in the past week by marking the box under the answer that is most appropriate.

	no	sometimes	regularly	often	very often or constantly
During the past week, did you suffer from dizziness or feeling light- headed?	0	0	0	0	0
During the past week, did you suffer from painful muscles?	0	0	0	0	0
During the past week, did you suffer from fainting?	0	0	0	0	

During the past week, did you suffer from neck pain?	0	0	0	0	\circ
During the past week, did you suffer from back pain?	0	0	0	0	0
During the past week, did you suffer from excessive sweating?	0	0	0	0	0
During the past week, did you suffer from palpitations?	0	0	0	0	0
During the past week, did you suffer from headache?	\circ	\circ	\circ	\circ	0
During the past week, did you suffer from a bloated feeling in the abdomen?	0	0	0	0	0
During the past week, did you suffer from blurred vision or spots in front of your eyes?	0	0	0	0	0
During the past week, did you suffer from	\circ	0	\circ	\circ	\circ

shortness of breath?					
During the past week, did you suffer from nausea or an upset stomach?	0	0	0	0	0
During the past week, did you suffer from pain in the abdomen or stomach area?	0	0	0	0	0
During the past week, did you suffer from tingling in the fingers?	0	0	0	0	0
During the past week, did you suffer from pressure or a tight feeling in the chest?	0	0	0	0	0
During the past week, did you suffer from pain in the chest?	0	0	\circ	0	0
During the past week, did you suffer from feeling down or depressed?	0	0	\circ	0	0
During the past week, did you suffer from	0	\circ	0	\circ	0

sudden fright for no reason?					
During the past week, did you suffer from worry?	0	0	\circ	\circ	0
During the past week, did you suffer from disturbed sleep?	0	0	0	0	0
During the past week, did you suffer from a vague feeling of fear?	0	0	\circ	\circ	0
During the past week, did you suffer from lack of energy?	0	0	\circ	0	0
During the past week, did you suffer from trembling when with other people?	0	0		0	0
During the past week, did you suffer from anxiety or panic attacks?	0	0	\circ	0	0
During the past week, did you feel tense?	0	0	\circ	0	0
During the past week, did you	0	\circ	\circ	\circ	\circ

0	\circ	\circ	\circ	0
0	0	0	0	0
0	0	0	0	0
0	0	\circ	0	0
	0			0
0	0	0	0	0

During the past week, did you feel that you would be better off if you were dead?	0	0	0	0	0
During the past week, did you feel that you can't enjoy anything anymore?	0	0	0	0	0
During the past week, did you feel that there is no escape from your situation?	0	0	0	0	0
During the past week, did you feel that you can't face it anymore?	0	0	\circ	0	0
During the past week, did you no longer feel like doing anything?	0	0	0	0	0
During the past week, did you have difficulty in thinking clearly?	0	0	0	0	0
During the past week, did you have difficulty getting to sleep?	0	0	0	0	0

During the past week, did you have any fear of going out of the house alone?	0	0	0	0	0
During the past week, did you easily become emotional?	0	\circ	0	0	0
During the past week, were you afraid of anything when there was really no need for you to be afraid? (for instance animals, heights, small rooms)			0	0	0
During the past week, were you afraid to travel on buses, streetcars/trams, subways or trains?	0	0	0	0	0
During the past week, were you afraid of becoming embarrassed when with other people?	0	0	0	0	0
During the past week, did you ever feel as if you were being	\circ	0	0	0	0

threatened by unknown danger?					
During the past week, did you ever think "I wish I was dead"?	0	0	\circ	0	0
During the past week, did you ever have fleeting images of any upsetting event(s) that you have experienced?		0	0	0	0
During the past week, did you ever have to do your best to put aside thoughts about any upsetting event(s)?	0	0	0	0	0
During the past week, did you have to avoid certain places because they frighten you?	0	0	0	0	0
During the past week, did you have to repeat some actions a number of times before you could do something else?	0	0	0	0	0

Appendix F

Teacher Stress Inventory

The following are a number of teacher concerns. Please identify those factors that cause you stress in your present position. Read each statement carefully and decide if you ever feel this way about your job. Then, indicate how strong the feelings are when you experience it by circling the appropriate number on the 5-point scale. If you have not experienced this feeling, or if the item is inappropriate for your position, circle number 1 (no strength; not noticeable). experienced this feeling, or if the item is inappropriate for your position, circle number 1 (no strength; not noticeable).

	no strength; not noticeable	mild strength; barely noticeable	medium strength; moderately noticeable	great strength; very noticeable	major strength; extremely noticeable
I easily overcommit myself.	0	0	0	0	0
I become impatient if others do things too slowly.	0	0	0	0	0
I have to try doing more than one thing at a time.	0	0	0	0	0
I have little time to relax/enjoy the time of day.	0	0	0	0	0
I think about unrelated matters during conversations.	0	0	0	0	0
I feel uncomfortable wasting time.	0	\circ	\circ	\circ	\circ

There isn't enough time to get things done.	0	\circ	\circ	\circ	\circ
I rush in my speech.	0	0	0	0	\circ
There is little time to prepare for my lessons/responsibilities.	0	\circ	\circ	\circ	0
There is too much work to do.	\circ	\circ	\circ	\circ	\circ
The pace of the school day is too fast.	\circ	\circ	\circ	\circ	\circ
My caseload/class is too big.	\circ	\circ	\circ	\circ	\circ
My personal priorities are being shortchanged due to time demands.	0	0	0	\circ	0
There is too much administrative paperwork in my job.	0	\circ	\circ	\circ	\circ
I lack promotion and/or advancement opportunities.	0	\circ	\circ	\circ	\circ
I am not progressing in my job as rapidly as I would like.	0	\circ	\circ	\circ	\circ
I need more status and respect on my job.	\circ	\circ	\circ	\circ	\circ
I receive an inadequate salary for the work I do.	\circ	\circ	\circ	\circ	\circ
I lack recognition for the extra work and/or good teaching I do.	0	\circ	0	\circ	\circ

I feel frustrated because of discipline problems in my classroom.	0	\circ	\circ	\circ	\circ
I feel frustrated having to monitor pupil behavior.	0	\circ	\circ	\circ	\circ
I feel frustrated because some students wold do better if they tried.	0	\circ	\circ	\circ	\circ
I feel frustrated attempting to teach students who are poorly motivated.	0	0	0	0	0
I feel frustrated because of inadequate/poorly defined discipline problems.	0	0	0	\circ	0
I feel frustrated when my authority is rejected by pupils/administration.	0	\circ	\circ	\circ	\circ
My personal opinions are not sufficiently aired.	0	\circ	\circ	\circ	\circ
I lack control over decisions made about classroom/school matters.	0	0	0	0	0
I am not emotionally/intellectually stimulated on the job.	0	0	0	\circ	0
I lack opportunities for professional improvement.	0	\circ	\circ	\circ	0
I respond to stress by feeling insecure.	0	\circ	\circ	\circ	\circ
I respond to stress by feeling vulnerable.	0	\circ	\circ	\circ	\circ

I respond to stress by feeling unable to cope.	0	\circ	\circ	\bigcirc	\bigcirc
I respond to stress by feeling depressed.	0	\circ	\circ	\circ	\circ
I respond to stress by feeling anxious.	0	\circ	\circ	\circ	\circ
I respond to stress by sleeping more than usual.	0	\circ	\circ	\circ	\circ
I respond to stress by procrastinating.	0	\circ	\circ	\circ	\circ
I respond to stress by becoming fatigued in a very short time.	0	\circ	\circ	\circ	\circ
I respond to stress with physical exhaustion.	0	\circ	\circ	\circ	\circ
I respond to stress with physical weakness.	0	\circ	\circ	\circ	\circ
I respond to stress with feelings of increased blood pressure.	0	\circ	\circ	\circ	0
I respond to stress with feelings of heart pounding or racing.	0	\circ	\circ	\circ	\circ
I respond to stress with rapid and/or shallow breath.	0	\circ	\circ	\circ	\circ
I respond to stress with stomach pain of extended duration.	0	0	\circ	\circ	0
I respond to stress with stomach cramps.	0	\circ	\circ	\circ	\circ
I respond to stress with stomach acid.	0	\circ	\circ	\circ	\circ

I respond to to stress by using over-the-counter drugs.	\circ	\circ	0	\circ	\circ
I respond to stress by using prescription drugs.	\circ	\circ	\circ	\bigcirc	\circ
I respond to stress by using alcohol.	\circ	\circ	\circ	\circ	\circ
I respond to stress by calling in sick.	\circ	\bigcirc	\circ	\circ	0

Appendix G

Teacher Burnout Scale

I look forward to teaching in the future.
Strongly Agree
Moderately Agree
Slightly Agree
Slightly Disagree
Moderately Agree
Strongly Disagree
I feel depressed because of my teaching experiences
Strongly Agree
Moderately Agree
Slightly Agree
Slightly Disagree
Moderately Agree
Strongly Disagree

I get adequate praise from my supervisors for a job well done.
Strongly Agree
Moderately Agree
Slightly Agree
Slightly Disagree
Moderately Agree
Strongly Disagree
The teaching day seems to drag on and on.
Strongly Agree
Moderately Agree
Slightly Agree
Slightly Disagree
Moderately Agree
Strongly Disagree
I am glad that I selected teaching as a career.
Strongly Agree
Moderately Agree
Slightly Agree
Slightly Disagree
Moderately Agree
Strongly Disagree

The students act like a bunch of animals.
Strongly Agree
Moderately Agree
Slightly Agree
Slightly Disagree
Moderately Agree
Strongly Disagree
My physical illnesses may be related to the stress in this job.
Strongly Agree
Moderately Agree
Slightly Agree
Slightly Disagree
Moderately Agree
Strongly Disagree
I feel that the administrators are willing to help me with classroom problems, should they arise.
Strongly Agree
Moderately Agree
Slightly Agree
Slightly Disagree
Moderately Agree

Strongly Disagree
I find it difficult to calm down after a day of teaching.
Strongly Agree
Moderately Agree
Slightly Agree
Slightly Disagree
Moderately Agree
Strongly Disagree
Teaching is more fulfilling than I had expected.
Strongly Agree
Moderately Agree
Slightly Agree
Slightly Disagree
Moderately Agree
Strongly Disagree
I feel that my efforts in the classroom are unappreciated by the administrators.
Strongly Agree
Moderately Agree
Slightly Agree
Slightly Disagree
Moderately Agree

Strongly Disagree
If I had it to do all over again, I would not become a schoolteacher.
Strongly Agree
Moderately Agree
Slightly Agree
Slightly Disagree
Moderately Agree
Strongly Disagree
I feel that I could do a much better job of teaching if only the problems confronting me were not so great. Strongly Agree
Moderately Agree
Slightly Agree
Slightly Disagree
Moderately Agree
Strongly Disagree
The stresses in this job are more than I can bear.
Strongly Agree
Moderately Agree
Slightly Agree
Slightly Disagree
Moderately Agree

Strongly Disagree
My supervisors give me more criticism than praise.
Strongly Agree
Moderately Agree
Slightly Agree
Slightly Disagree
Moderately Agree
Strongly Disagree
Most of my students are decent people.
Strongly Agree
Moderately Agree
Slightly Agree
Slightly Disagree
Moderately Agree
Strongly Disagree
Most students come to school ready to learn.
Strongly Agree
Moderately Agree
Slightly Agree
Slightly Disagree
Moderately Agree

Strongly Disagree
I feel that the administrators will not help me with classroom difficulties
Strongly Agree
Moderately Agree
Slightly Agree
Slightly Disagree
Moderately Agree
Strongly Disagree
I look forward to each teaching day.
Strongly Agree
Moderately Agree
Slightly Agree
Slightly Disagree
Moderately Agree
Strongly Disagree
The administration blames me for classroom problems.
Strongly Agree
Moderately Agree
Slightly Agree
Slightly Disagree
Moderately Agree

Strongly Disagree
Students come to school with bad attitudes.
Strongly Agree
Moderately Agree
Slightly Agree
Slightly Disagree
Moderately Agree
Strongly Disagree

Appendix H

World Health Organization Quality of Life, Short Form

The following questions ask how you feel about your quality of life, health, or other areas of your life. Please read each question and the response options. **Please choose the answer that appears most appropriate.** If you are unsure about which response to give to a question, the first response you think of is often the best one.

Please keep in mind you standards, hopes, pleasures, and concerns. Please think about your life **in the last four weeks.**

How would you rate your quality of life?
Very poor
Poor
Neither poor nor good
Good
Very Good
How satisfied are you with your health?
Very dissatisfied
Dissatisfied
Neither satisfied not dissatisfied
Satisfied
Very satisfied
e last four weeks. To what extent do you feel that physical pain prevents you from doing what you need
do?
Not at all
A little
A moderate amount
Very much
very mach
An extreme amount

	A little
	A moderate amount
	Very much
	An extreme amount
	much do you enjoy life?
	Not at all
	A little
	A moderate amount
	Very much
	An extreme amount
	that extent do you feel your life to be meaningful?
	Not at all
	A little
	A moderate amount
	Very much
	An extreme amount
	well are you able to concentrate?
	Not at all
	A little
	A moderate amount
	Very much
	An extreme amount
	safe do you feel in your daily life?
	Not at all
	A little
	A moderate amount
	Very much
	An extreme amount
How	healthy is your physical environment?
	Not at all
	A little
	A moderate amount
	Very much
	An extreme amount

The following questions ask about how completely you experience or were able to do certain things in the last four weeks.

Do you have enough energy for everyday life?
Not at all
A little
Moderately
Mostly
Completely
Are you able to accept your bodily appearance?
Not at all
A little
Moderately
Mostly
Completely
Have you enough money to meet your needs?
Not at all
A little
Moderately
Mostly
Completely
How available to you is the information that you need in your day-to-day life?
Not at all
A little
Moderately
Mostly
Completely
To what extent do you have the opportunity for leisure activities?
Not at all
A little
Moderately
Mostly
Completely
How well are you able to get around?
Very poor
Poor

Neither poor nor good
Good Very good
very good
How satisfied are you with your sleep?
Very dissatisfied
Dissatisfied
Neither satisfied not dissatisfied
Satisfied
Very Satisfied
How satisfied are you with your ability to perform your daily living activities?
Very dissatisfied
Dissatisfied
Neither satisfied not dissatisfied
Satisfied
Very Satisfied
How satisfied are you with your capacity for work?
Very dissatisfied
Dissatisfied
Neither satisfied not dissatisfied
Satisfied
Very Satisfied
How satisfied are you with your self?
Very dissatisfied
Dissatisfied
Neither satisfied not dissatisfied
Satisfied
Very Satisfied
How satisfied are you with your personal relationships?
Very dissatisfied
Dissatisfied
Neither satisfied not dissatisfied
Satisfied
Very Satisfied
How satisfied are you with your ability to perform your sex life?

Appendix I

Welcome Letter and Informed Consent

Welcome to the research study!

Dear Participant Teacher,

I am a graduate student working under the direction of Professors Frankie Clark, Luis E. Aguerrevere, and Nina Ellis-Hervey at the Human Services Department at Stephen F. Austin State University. We are conducting a research study to better understand the mental health of teachers as well as their perceptions of school/district supports for emotional concerns. We are requesting your participation in the study, which will involve completing an on-line questionnaire. The survey will include questions for demographic classification; personally identifiable information such as your name or contact information will not be collected. Other questions will regard your emotional, physical, and mental health; stress you experience as a teacher; and the supports your school or district provides you.

The study should take you around 20 minutes to complete. Please be assured that your responses are anonymous and will be kept entirely confidential. As stated, this survey does not require personally identifiable information. We will not collect IP addresses. Your participation in this research is voluntary. You have the right to withdraw at any point during the study, for any reason, and without penalty or loss of benefits to which you are otherwise entitled. Refusal to participate will involve no penalty or loss of benefits to which you are otherwise entitled. Moreover, your responses will not be released to anyone not directly involved in the study.

There is no physical, psychological, legal, or other risk in this study. You will, however, be asked to disclose information that you may feel is personal or sensitive.

Should you have any questions or concerns associated with the research study, please call or email Dr. Aguerrevere at 936-468-1153 or aguerrevle@sfasu.edu.

By clicking the button below, you acknowledge that your participation in the study is voluntary, you are 20 years of age, and that you are aware that you may choose to terminate your participation in the study at any time and for any reason.

Please note that this survey will be best displayed on a laptop or desktop computer. Some features may be less compatible for use on a mobile device.

Thank you for your assistance, Jay Potter
To obtain a copy of this letter, please print the screen.
If you have questions about your rights as a participant in this research or if you feel you have been placed at risk, please contact the Office of Research and Sponsored Programs at Stephen F. Austin State University at 936-468-6606.
○ I consent, begin the study
I do not consent, I do not wish to participate

Appendix J

Teacher Personal Awareness

Please answer the following questions about your current mental health.

the past year?
receiving? (Please mark all that

 Change diet/nutrition
 Increase exercise
 Hospitalization (in the last 6 months)
Pastoral/religious interventions
 Education/reading about diagnosis
 Brain stimulation (electric/magnetic procedures)
Other

Appendix K

Available Supports

Please answer the following about services/activities directly available to you through your school or district.

Which of the following are available, or have been available in the past two years, to you **through your school or district**? (Please mark all that apply.)

Mental health professionals.
Group physical activity. (Yoga, organized walking, Zumba, Tia Chi, etc.)
Regular planned social gatherings at school
Regular planned social gatherings outside of school
Staff activities such as Secret Pal
Minor supportive gifts. (i.e. Candy with message of support or ement.)
Bonus pay, (i.e. Christmas/Mid-year bonus)
Special recognition or awards
Training specific to advance in your career
Budgeted funds for classroom supplies
Community recognition (i.e. Special local discounts for teachers)

Have you participated in any of the activities in the previous question?		
O Yes		
○ No		
	following have you accessed in the past year, through your school or se mark all that apply.)	
	Mental health professionals	
	Group physical activity. (Yoga, organized walking, Zumba, Tia Chi, etc	
	Regular planned social gatherings at school	
	Regular planned social gatherings outside of school	
	Staff activities such as Secret Pal	
encourage	Minor supportive gifts. (i.e. Candy with message of support or ment.	
	Bonus pay, (i.e. Christmas/mid-year bonus)	
	Special recognition or awards	
	Training specific to advance in your career	
	Budgeted classroom funds for supplies	
	Community recognition (i.e. Special local discounts for teachers)	
with your sch	following organizations or health care professionals have arrangements and or district (not through insurance) to provide interventions to ase mark all that apply.)	
	A school-linked health center.	

A community health clinic.
A local health department.
A local hospital.
A local mental health or social services agency.
A university or medical school.
A private physician.
A private therapist. (psychologist, counselor)
Other
ed any of the providers from the previous question?
following organizations or health care professionals have you accessed angements with your school or district (not through insurance) provided to ease mark all that apply.)
A school-linked health center.
A community health clinic.
A local health department.
A local hospital.
A local mental health or social services agency.
A university or medical school.

	A private physician.			
	A private therapist. (psychologist, counselor)			
	Other			
Which, if any, of the following topics have been the subject of staff development in the past two years in your school or district? (Please mark all that apply.)				
	Nutrition and dietary behavior			
	Self-care			
	Teacher mental health			
	Substance use/abuse interventions			
	Smoking cessation			
	Time management			
	Physical fitness/exercise			
Which of the following topics would you like to receive further staff development on through your school or district? (Please mark all that apply.)				
	Nutrition and dietary behavior			
	Self-care			
	Teacher mental health			
	Substance use/abuse interventions			
	Smoking cessation			
	Time management			

Physical fitness/exercise

Vita

James H. "Jay" Potter resides in Livingston, Texas. He may be reached at. Jay graduated

from Nacogdoches High School in Nacogdoches, Texas, in 1986. In 1990, he received

his Bachelor of Arts degree in Communication from Stephen F. Austin State University

in Nacogdoches, Texas. Jay entered graduate school at Stephen F. Austin State

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Style manual designation: American Psychological Association, 7th Ed. – modified to

meet graduate school requirements.

This dissertation was typed by Jay Potter

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