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The Effect of Collective Efficacy on Stress Among Elementary Teachers

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Walden University
2020

Abstract

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Dissertation Submitted in Partial Fulfillment

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Abstract

Stress among teachers has been an area of increasing concern in education. This study was designed to examine the role of collective efficacy on negative stress effects experienced by elementary general and special education teachers and to determine the difference between effects, if any, in both groups. This topic is important to school leaders and teachers because many teachers are leaving the field, resulting in a shortage of teachers across the United States. The study's theoretical framework consisted of social cognitive theory, the theory of collective efficacy, and equity theory. Data were collected using the Collective Efficacy Scale, Short Form, a 12-item Likert scale that measures teacher collective efficacy and has three levels (high, average, and low efficacy), and the Teacher Stress Inventory-Revised, a 49-item, 10-factor instrument that measures the extent to which teachers experience occupational stress. Participants (207 elementary teachers in South Carolina) were recruited through Facebook postings. A 2x3 ANOVA was performed to analyze the difference among the groups. Findings showed no difference between general and special education teachers in their stress levels. However, teachers' level of collective efficacy had an effect on their stress levels; as collective efficacy increased, stress decreased. There was no significant interaction found between teachers' classification (general or special education) and teachers' level of collective efficacy on their stress levels. These findings contribute to positive social change by providing insight into how collective efficacy influences stress in general and special education teachers. This information may help school leaders provide new and/or improved resources that foster collective efficacy and lower stress among teachers.

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Dedication

This dissertation is dedicated to my family. I would like to thank my parents, Arizona and Annette DeVane, for encouraging me to never stop learning. Because of your encouragement, I strive to do my best and never give up. I am so very thankful for my husband, Vernon Rich Jr. You have supported me throughout this journey and pushed me when I did not want to keep pushing. You have been there for me through my ups and downs along the way. I am so thankful!

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Chapter 1: Introduction to the Study

Introduction

Stress among teachers has been an area of increasing concern in education. Teachers are more likely to describe themselves as depressed, to be less committed to their institution, and to have lower levels of job satisfaction than other professional groups (Duxbury & Higgins, 2013). The effect of occupational stress and its relationship to teachers leaving the profession is a growing area of concern in the field of education (Brunsting, Sreckovic, & Lane, 2014). There are studies that address teacher stress and teacher self-efficacy (Klassen & Chiu, 2011; Kyriacou, 2001; Platsidou & Agaliotis, 2017); however, there is an inadequate amount of literature that addresses teacher stress, collective efficacy, and differences in stress levels between general education and special education teachers. According to Emery and Vandenberg (2010), special education teachers are at high risk of stress and prone to low job satisfaction and efficacy, a finding that suggests that the likelihood for stress is increased in this group compared to general education teachers. In this chapter, I will discuss stress and collective efficacy in detail as well as present the purpose, research questions (RQs) and hypotheses, introduction of the theoretical framework, and the nature of the study. The assumptions, scope and delimitations, limitations, and significance of the study will also be discussed.

Background

The background is divided into four major sections. In the first section, I provide an overview of stress and stress in the teaching profession, and, in the second, I describe collective efficacy. The third section includes a discussion of job satisfaction and teacher

training. In the last section, an overview of special education statistics and law is discussed.

Stress

Stress has been studied for years, and it is defined differently among various academic fields (Saleem & Shah, 2011). In some fields of study, stress is considered to be a process while in others it is considered to be a result of interactions that are influenced by culture or customs (Saleem & Shah, 2011). As I discuss in this subsection, stress seems to be universal and inescapable among educators, therefore, it is essential to understand stress as it relates to education.

Stress represents a response that the body experiences when situations and circumstances change and an individual is required to adapt. This response may be due to an internal stressor (e.g., anxiety, depression) or external stressor (e.g., environmental, life event) and may manifest itself physically or mentally (Holahan, Moos, Holahan, Brennan, & Schutte, 2005). Teachers may experience stress when they have feelings that result in negative or undesirable thoughts and emotions due to some aspect of their job (Kipps-Vaughan, 2013; Kyriacou, 2001). Kyriacou (2001) indicates that the degree of anxiety and tension experienced and teachers' reactions to a range of situations in the environment may play a role. The stress is reinforced by the person's perception that his or her job is jeopardizing his or her happiness and/or confidence.

When teachers experience high levels of stress, they often face health issues soon after (Kyriacou, 2001; Naghieh, Montgomery, Bonell, Thompson, & Aber, 2015). Other researchers also note that teacher stress affects their physical health and well-being

(Haydon, Leko, & Stevens, 2018; Katz, Greenburg, Klein, & Jennings, 2016). Katz et al. (2016) note that as a result of chronic stress, teachers may experience exhaustion and negative changes in biological indicators of stress. Stress may result in symptoms such as headaches, muscle aches and pain, hair loss, eating disorders, indigestion, diarrhea, and/or heart palpitations (Holahan et al., 2005). Also, teachers who are chronically stressed may show uncommon daily patterns of stress responsiveness and levels of cortisol (Algozzine, Wang, & Violette, 2011).

According to Kipps-Vaughan (2013), teacher stress is experienced in all cultures where teachers make an effort to encourage student learning. Stress can be manifested in various ways and can affect the way a teacher feels and behaves and what physical demands the teacher experiences (Fimian, 1982). Stress also affects the classroom environment and over a period of time, influences student learning (Kipps-Vaughan, 2013). Wong, Ruble, McGrew, and Yu (2017) investigated the effects of teacher stress on teacher/student behavior and discovered that stress affects teaching quality as well as student engagement. These factors are affected when teachers who are stressed experience irritability, frustration in the classroom, and impatience with students. Consequently, students do not receive the physical and/or emotional care that is needed for them to flourish (Kipps-Vaughan, 2013). Attributes of stress are defined by Zhang (2002) as general education teachers exhibiting poor teaching, a poor relationship with other teachers and students, an absence of understanding and compassion for students, impatience with students, disinterest in school functions, and low morale. Extreme worrying is also an indication of stress, which results in a failure to teach students at an

acceptable level (Fimian, 1982). These symptoms may cause teachers to be absent often, as well as leave the field for jobs outside of teaching or retire early (Kipps-Vaughan, 2013). Ingersoll (2001, 2012) and Wong et al. (2017) agree that when teachers are not satisfied with their job, they demonstrate a lower level of dedication and loyalty and have a greater likelihood of leaving their teaching career. High stress levels are noted to be one of the primary reasons that 25 to 50% of teachers leave the teaching profession within their first 5 years of teaching (Algozzine et al., 2011; Emery & Vandenberg, 2010).

Other factors contribute to teacher stress, as well. An educator's ability to help students to be successful may be affected by the diverse learning needs of students or the type of classrooms that they are in (e.g., self-contained classroom; Thornton, Peltier, & Medina, 2010). Teachers of students with disabilities may thus experience stressors that other teachers do not experience (Brownell & Smith, 1993; Clement, 2017; Mazzone & Miglionico, 2014). In addition, special education teachers experience a greater level of stress due to expected outcomes for student performance (i.e., special education students are expected to perform in the proficient range on state standardized assessments; Thornton, et al., 2010). There are various other conditions and situations in the special education setting that result in added stress for teachers. Some circumstances may consist of core curriculum, approaches in instruction, number of students, income, time, and organizational issues (Billingsley, Carlson, & Klein, 2004). Furthermore, general education teachers and administration are often unfamiliar with and do not understand what special education entails. In a study by Haydon et al. (2018), special education

teachers reported that administrators had little knowledge of special education, which contributed to their stress levels and perception that they were not being supported (see also Billingsley, 2002).

Some teachers, in general, experience stress and frustration as a result of managing chronic behavior in the classroom. As a result, teachers experience low self-efficacy and low job satisfaction (Landers, Servillio, Tuttle, Alter, & Haydon, 2011). Klassen (2010) noted that teachers' specific classroom management skills can lessen feelings of stress regarding student behavior while other researchers have found that a sense of efficacy in managing the classroom is associated with lower stress among teachers. The results from Landers et al.'s (2011) study suggest, for instance, that the beliefs of teachers in their collective abilities to manage student behavior offer some respite from the negative influences that job stress has on satisfaction from teaching. In their study, Landers et al. found that stress from workload may be more difficult to counteract than stress due to student behavior. Teachers' perceptions of stress from their workload appeared to be unaffected by their collective confidence in approaches to instruction. On the other hand, stress from student behavior may be alleviated when a school focuses on building collective efficacy to enhance student discipline.

Stress that teachers experience due to their job may be improved by support from their colleagues and leaders in the school and from a sense of collective efficacy (the perception that the staff of a school, as a whole, is able to successfully work with one another to enhance the behavior and learning of students). Studies have shown that teacher collective efficacy could possibly have a positive influence on job satisfaction

(Caprara, Barbaranelli, Borgogni, & Steca, 2003). Haydon et al. (2018) found that experiencing positive peer interactions was the most declared protective factor from stress. Specifically, skills such as being friendly, helpful, and supportive; possessing a positive attitude; and using straightforward, clear, and consistent communication as well as being good listeners were noted.

Collective Efficacy

Bandura (1997) defined self-efficacy as an individual's beliefs regarding his or her capability to perform a specific undertaking with success. Wide-spread research indicates that self-efficacy significantly affects human achievement in many different settings. As it relates to teachers, self-efficacy plays a role in their teaching performance and the motivation and achievement of their students (Skaalvik & Skaalvik, 2007; Tschannen-Moran & Wolfolk Hoy, 2001). According to Jex and Thomas (2003), collective efficacy is comparable to self-efficacy. Collective efficacy represents performance expectations of a group rather than an individual. The term was initially introduced by Albert Bandura (1986). He contended that collective efficacy has an effect on what individuals do as a group, how much effort they put into it, and their determination when the efforts of the group are unsuccessful at producing results (Bandura, 1986). When collective efficacy levels of a group are high, individuals in that group are very confident in the group's capability of performing its most essential responsibilities and to overcome difficulties in performance (Jex & Thomas, 2003). According to Bandura (1977, 1986, 1997), the key to student success is centered on the teachers' collective belief that they can have a strong influence on student achievement

despite the circumstances and situations surrounding the students (Sandoval, Challoo, & Kupczynski, 2011).

Goddard (1998) defined collective efficacy as the average teachers' belief in the faculty's ability and the ability it possesses to positively affect the academic achievement of students. Goddard suggested that teachers' perceptions influence the school climate and culture which contributes to the different effect schools have on the academic success of students. It has been shown that collective efficacy is a positive influence and contributing factor to student achievement.

Collective efficacy is associated with a teacher's commitment and fortitude. Angelle and Teague (2014) indicate that when a teaching faculty has a high collective efficacy, they have great confidence in their ability to meet their goals and achieve what they set out to do. Teachers in schools with high collective efficacy feel like they are held accountable for the academic outcomes of their students. These teachers do what they can to help all students achieve no matter the student's background (Tschannen-Moran & Barr, 2004).

The definition of collective efficacy used in this study is "the judgment of teachers that the faculty as a whole can organize and execute the necessary courses of action in order to have a positive effect on student learning" (Goker, 2012, p. 1545). The attributes of collective efficacy are comprised of a strong sense of togetherness and the belief that they can help children to learn; teachers who are prepared; and a belief that all children can learn (Brinson & Steiner, 2007).

When teachers receive support from their colleagues and have a feeling of collective efficacy, this can act as a protection against teachers burning out and leaving the profession. Collaborating and discussing concerns and problems at work may provoke feelings of unity and empathy, as well as thwart attitudes and feelings of indifference and negativity towards others (Droogenbroeck, Spruyt, & Vanroelen, 2014). Haydon et al. (2018) found that the support of administration that aids in building collaboration among teachers, changes negative teacher perceptions, and encourages health and well-being can be protective factors against stress.

Job Satisfaction and Training

According to Stempien and Loeb (2002), the majority of general education teachers indicate that they are satisfied with their teaching jobs. According to research, numerous teachers of general education have maintained that they do not believe that they have received the necessary training to teach students with disabilities (Zhang, Wang, Losinski, & Katsiyannis, 2014). In addition, these educators believe that they are ineffective, they require encouragement, and the actions of their students results in high stress levels. The absence of training for teachers in general education could affect the application of classroom best practices.

Stempien and Loeb (2002) found that special education teachers at the beginning of their careers experience greater difficulty with satisfaction as it relates to their job than general educators in the beginning of their careers or experienced special educators. Some teachers feel that both general and special education teachers should be trained together in order that they have a more effective working relationship and environment

(Whitaker, 2000). According to Claycomb (2000), regardless of the kind of program that beginning teachers go through, numerous beginning general education teachers will leave education due to stress that they experience as it relates to educating children that have disabilities. Special educators have a greater likelihood to leave teaching when compared to general educators (usually within the first five years of beginning their teaching career; Claycomb, 2000). Depending on the type of programs that an educator goes through, he or she may be more satisfied with his or her job and remain in the teaching field (Whitaker, 2000).

Special Education Statistics and Law

According to Dewey, Sindelar, Bettini, Boe, Rosenberg, & Leko (2017), the demand for special education teachers continuously increased from 1975 to 2005 due to the enactment of Public Law 94-142. The number of special education teachers in the United States decreased by more than 17% from 2005 to 2012. This seems to be consistent with a decrease in the number of children identified with disabilities, which began in 2005; however, the number of teachers decreased drastically more than the number of students in special education. Data suggest that 4% fewer children were served in special education in 2012 than in 2005 and 17% fewer special education teachers were working in schools in the United States in 2012 than in 2005. There was an increase in the number of students with disabilities by approximately 2.8% from 2012 to 2014. The student: teacher ratio in special education increased from 14.29 in 2005 to 16.43 in 2012.

Dewey et al. (2017) strived to uncover the reason for the decline in the number of special education teachers employed in the United States. Some reasons for decrease in demand included budget shortfalls, which resulted in layoffs and/or closing of positions; changes in public policy (e.g. No Child Left Behind Act of 2001, Reauthorization of the Individuals with Disabilities Education Act), which may promote change in the method that schools serve students with disabilities. Dewey et al. also found that recent reductions in special education teachers were driven by decreases in the prevalence of disabilities and the relative ratio of teachers to students in special education versus general education, which favored the general education.

Congress passed Public Law 94-142, also known as the Education for All Handicapped Children Act, in 1975. Because of this law, students with disabilities were able to attend the same schools as their nondisabled peers. Prior to the enactment of this law, students with disabilities were often excluded. This law guaranteed an opportunity of public education to all students, regardless of any disabling conditions. Schools were now mandated to match the needs and abilities of all children. The law indicates that services should be provided to children in the least restrictive environment as much as possible. For example, a student with a disability should have an opportunity to be educated with nondisabled peers, as much as possible when appropriate (Keogh, 2007).

Numerous revisions to The Education for All Handicapped Children Act have been made. PL 94-142 was reauthorized in 1997 as the Individuals with Disabilities Education Act (IDEA) and was amended in 2004. IDEA requires identification and education of children from birth to age 21; high standards for teachers who teach special

education classes; and alignment with the No Child Left Behind Act (NCLB), among other obligations (IDEA: Individuals with Disabilities Education Act, 2004). Together, these laws and reauthorizations help to provide a sufficient, appropriate education in a suitable environment for children with disabilities. Special education is an educational program, which is developed specifically for students who have been identified as having disabilities. The disabilities may be of a cognitive or physical nature and generally prevent students from achieving at the same rate as his or her typically developing peers.

Problem Statement

Teaching can be a very stressful profession. Special education teachers report more stress than general education teachers and as a result may leave special education to teach general education or leave the teaching profession altogether (Billingsley & Cross, 1991). In his examination of the differences in stress levels between general and special education teachers, Lazuras (2006) found that special education teachers had higher job stress scores than those of general education teachers. Lazuras also found that special education teachers seem to experience considerable problems resulting from issues related to organizational characteristics of their job. Organizational structure; task characteristics, such as the lack of necessary information about what to do and how to do it; poor supervision; and weak bonds among colleagues were described as stressors that possibly hinder the performance of teachers (Lazuras, 2006). As a result of stress, teachers may become burned out. This may cause them to distance themselves and become detached from their colleagues and their students (Richards, 2012).

According to Klassen (2010), a feeling of collective efficacy--"the shared perceptions of teachers in a school that the efforts of the faculty as a whole will have positive effects on students" (Hoy, 2013, para. 1)--may have a positive effect on the way teachers experience stress. Few studies have been done on the link between teacher collective efficacy and job stress, according to my review of the literature, and it is not known whether special education teachers experience positive effects to the same extent as general education teachers when it comes to collective efficacy. To address this gap in the literature, I examined the role of collective efficacy, comparing the effects of stress levels between general education and special education teachers to determine whether a difference exists between the two groups of teachers.

Purpose of the Study

The purpose of this quantitative study was to determine if collective efficacy has an effect on stress among elementary special education teachers compared to elementary general education teachers. The independent variables in this study were (a) teacher classification (elementary general education or special education) and (b) teachers' sense of collective efficacy (high, average, or low efficacy). The dependent variable was teachers' stress level.

Research Questions and Hypotheses

I sought to answer three RQs based on the study purpose and test their associated hypotheses. The RQs and hypotheses were as follows:

RQ1 – Quantitative: Is there a difference in stress among elementary special education teachers compared to elementary general education teachers?

Null Hypothesis (H_0) 1. There is no difference in stress among elementary special education teachers compared to elementary general education teachers.

Alternative Hypothesis (H_1) 1. There is a difference in stress among elementary special education teachers compared to elementary general education teachers.

RQ2 – Quantitative: Is there a difference in stress between three levels of collective efficacy—high, average, or low—among elementary teachers?

Null Hypothesis (H_0) 2. There is no difference in stress between three levels of collective efficacy—high, average, or low—among elementary teachers.

Alternative Hypothesis (H_1) 2. There is a difference in stress between three levels of collective efficacy—high, average, or low—among elementary teachers.

RQ3 – Quantitative: Is there a difference in stress based on an interaction between level of collective efficacy and level of teaching among elementary teachers?

Null Hypothesis (H_0) 3. There is no difference in stress based on an interaction between level of collective efficacy and level of teaching among elementary teachers.

Alternative Hypothesis (H_1) 3. There is a difference in stress based on an interaction between level of collective efficacy and level of teaching among elementary teachers.

Theoretical Framework

The inception of collective teacher efficacy was established using Bandura's (1977, 1986, 1997) research regarding the social cognitive theory, which proposes that behavior changes of teachers take place and functions through self-efficacy beliefs (Sandoval et al., 2011). Klassen (2010) used the theory of collective efficacy to examine

the relationship between stress and teachers' feelings about collaboration and support of their colleagues and school leaders. Klassen noted that numerous teachers have a sense of satisfaction from their work; however, their level of satisfaction declines when stress as a result of student behavior and the demands of teaching are high. The equity theory proposed by Adams (1963) may also explain the relationship between job stress of teachers and their perceptions of collective efficacy. The foundation of this theory is based on the thought that employers believe that employees come to be discouraged and less motivated if they feel as if they put in more than they get back. These theories will be discussed in more detail in chapter 2.

Nature of the Study

The nature of this study was quantitative. I used a 2x3 analysis of variance (ANOVA) to analyze the data. The first independent variable was teacher classification, with two levels: general education teachers and special education teachers. These teachers were required to possess a current teaching certificate and have taught at least three full school years. The second independent variable in the research design was the teachers' feeling of collective efficacy with three levels: high, average, and low efficacy. The dependent variable was teacher's stress levels, measured by the Teacher Stress Inventory-Revised (TSI; Fimian, 1984), rated by teachers with five levels that range from 1 (*not noticeable*) to 5 (*extremely noticeable*). TSI scores obtained from these ratings are then summed and divided in order to get ratio subscale scores and a Total Stress Score. I examined whether or not teaching special education students has a different effect on

stress levels as compared to teaching general education and if these stress levels are affected by feelings of collective efficacy.

I used the Collective Efficacy Scale, Short Form (CE Scale, Short Form; Goddard & Hoy, 2003) to measure the independent variable teacher collective efficacy. Standard scores on this scale from 200 to 400 are in the low range, indicating that the score is between 99 percent and 84 percent lower than the sample; standard scores at 500 are in the average range; and standard scores from 600 to 800 are in the high range, indicating that the score is between 84 percent and 99 percent higher than the sample.

I recruited teachers through posts to Facebook as well as posts to teacher groups on Facebook. Participant recruiting and data collection was accomplished online using the online survey software, Survey Monkey. Data collection is presented in greater detail in Chapter 3.

Definitions

I will use the following terms and definitions in this study. These definitions help readers to understand the purpose of this study.

Collective efficacy: Performance expectations of groups rather than individuals. The assurance of an individual in a group's ability to perform its most important responsibilities and to rise above performance obstacles (Jex & Thomas, 2003).

General education: Instruction that is designed for students who do not have a disability. This form of instruction is grounded in a core curriculum (NCLB, 2001).

Special education: Instruction that is specially designed for students who have disabilities. This instruction may be delivered in a special education classroom or a

general education classroom. Examples of special education classrooms include resource models or self-contained models (IDEA, 2004).

Stressor: A condition or occurrence that causes a stress response that is seen as negative (Anisman & Merali, 1999).

Teacher stress: The emotional state exhibited by a teacher of unwanted and unfavorable feelings as a result of some aspect of his or her job as a teacher. This may consist of the amount of strain and anxiety the teacher experiences and the way that he or she responds to different situations and circumstances (Kyriacou, 2001).

Assumptions

In this research study, I assumed that teacher roles do not overlap. General education teachers were only teaching the general education curriculum and special educators were only teaching special education curriculum. It was also assumed that the teacher respondents were accurate and objective in expressing their perceptions of the problems and stresses that they experience on a day-to-day basis as it relates to their teaching career. Another assumption was that teachers were truthful and honest about how they felt about their sense of togetherness and the belief that they can help children to learn. It was also assumed that each individual who chose to participate in the study was an elementary education teacher.

History refers to any occurrence outside of the research study that can alter or effect participants' performance. The behavior and attitudes of participants, and their survey responses could be affected by events that the researcher is unaware of (Salkind, 2010). For this study, I was concerned with participants' experiences with stress, their

feelings of collective efficacy, and how they differ between groups (special education and general education teachers). It is possible that participant responses could have been either positively or negatively affected by events that have not been reported or environmental events that are not anticipated, such as mass shortages, death of a loved one, or natural disaster. The variable of interest could be affected by these events via the responses to survey questions by participants. However, it was assumed that the probability of these chance events would occur within all regions of South Carolina are similar, therefore, making a history threat less prominent and any differences that were identified between groups to be a result of some other influence.

Mortality refers to attrition, withdrawals, or dropouts. This could be an issue with groups that are uneven. For this study, attrition may have occurred due to the length of time that it takes to complete the survey (more than 10 minutes for some). It is also possible that individuals may have withdrawn from the study due to being stressed about work. Answering questions regarding stress and their job may have provoked them to become stressed and therefore discontinue completion of the survey. Providing an incentive for completion was considered to encourage participants to answer the survey questions until completion; however, this was decided against.

Scope and Delimitations

The present research was limited to elementary school teachers in South Carolina (using Facebook posts on my timeline, as well as posts to SC Facebook teacher groups, to collect data). This group is typical of other groups of teachers in other states. This study was designed to determine if collective efficacy has an effect on stress among elementary

teachers. Specifically, the CE Scale, Short Form, and the TSI were used to measure teacher's perceptions of collective efficacy and stress levels. This focus was chosen to help understand the effects of stress factors in combination with teachers' sense of collective efficacy in both general education teachers and special education teachers. Job satisfaction is linked to stress levels, and Klassen (2010) indicates that job satisfaction is positively affected by collective efficacy.

Limitations

The research was conducted via online survey. Participants were recruited from personal Facebook posts as well as from Facebook teacher groups. This limited the population and omitted individuals who may not be proficient at using online tools or do not access the social media site, Facebook.

Another limitation may be that individuals who feel stressed about work and/or feel overworked may not have wanted to complete a survey about work. They may have felt that they did not have time to do so, or they simply did not want to complete it. This may have resulted in a skewed number of respondents who have a more favorable attitude toward their jobs. Despite these limitations, it is expected that these results may benefit teachers who are working toward eliminating the effects of stress.

Significance

Teacher stress and collective efficacy are issues that influence teachers in all levels in both general education and special education. Teacher stress is an increasing concern in the educational field (Brunsting et al., 2014; Kyriacou, 2001). There are some studies focusing on teacher stress and collective efficacy (Klassen & Chiu, 2011;

Kyriacou, 2001; Platsidou & Agaliotis, 2017); however, there is not much research that speaks to teacher stress, collective efficacy, and whether or not there is an effect among general and special education teachers. Given my experiences, the motivation for conducting this study included the possibility that the effect of stress and collective efficacy compared between general and special education teachers may be an important factor that should be considered when examining attrition in general and special education teachers.

Gaining knowledge about the situations and circumstances that cause stress in teachers, and the differences between general education and special education teachers may contribute to, or promote, the development of interventions for them and school systems depending on the findings. Leaders may not be aware of the extent to which teachers feel stress and circumstances behind these feelings. Being informed of these effects may help leaders/administration develop strategies to help teachers to feel that they have a support system that they can turn to for help so that they can be successful in their positions, and are less likely to become burned-out. It is my hope that the findings of this study will encourage new insights that are not already known or recognized among teachers in the field.

Burnout is an important concept to consider because burnout is often considered an outcome of chronic stress. It is a long-term natural consequence of stress, whereas stress is what a person experiences immediately following specific stressors (Wong et al., 2017). Sarmah and Baruah (2012) suggest that because burnout is the initial response to stress, it would be important to assess the stress levels of teachers on a regular basis (e.g.,

with surveys). When this is done, interventions can be implemented early in order to prevent stress from the job from playing a role in mental and physical health problems. "Empirical research has shown that individual interventions, such as teaching about the effects of stress and techniques to cope with occupational stress, are effective" (p. 7). When teachers are able to do a good job at regulating themselves, they may feel less stress as a result of their jobs. Consequently, teachers will have better relationships with colleagues and students, and feel more satisfied with their work. Because of the better relationships with their teachers, students may be more likely to work towards higher achievement. They will then be better assets for their community and nation in order to promote social change.

With this study, I sought to determine the effect of teacher collective efficacy and level of teaching, general and special education, on stress among elementary teachers. The results of this study may be used to understand the effects of perceived stress factors in combination with perceived teacher collective efficacy in both general education teachers and special education teachers. The results of this study may also be used as a basis to researching teacher attrition.

Summary

Understanding how stress and collective efficacy have an effect on teachers is important. The research concerning both teacher stress and teacher collective efficacy interaction together is limited. Previous studies related to these variables do not put them together. The purpose of this research is to understand the association between teacher stress and teacher collective efficacy in general education teachers and special education

teachers. Additionally, the stress levels of both general education teachers and special education teachers were compared to see whether there was a difference.

Both general education and special education teachers experience similar struggles of managing certain characteristics of students; workload; increasing level of student performance; etc. However, special educators are instructing students with more specialized needs and those students are also expected to perform in the proficient range on state standardized assessments. These students may also have different kinds of behavioral needs that special educators are managing. In addition, some general education teachers and administrators are unfamiliar with and/or do not understand the ins and outs of special education, which in turn, contributes to the stress of special educators. Due to these differences, it seems that levels of stress, as well as levels of collective efficacy would differ between these two groups.

Determining this information will increase the knowledge base regarding the effects teacher collective efficacy and teacher stress have on general and special education teachers. Understanding how teacher stress and teacher collective efficacy affect educators may lead to a beginning point of understanding what positive variables are working for teachers, and how negative situations such as teacher attrition may be avoided.

Chapter 2: Literature Review

Introduction

The purpose of this study was to examine the extent to which stress levels vary among elementary general and special education teachers, as well as the extent to which having a sense of collective efficacy affects teacher stress in a sample of teachers in South Carolina. As such, the purpose of the literature review is to provide an understanding of the differences in the duties of general education and special education teachers, teacher stress and burnout, and the benefits of support and a feeling of collective efficacy. The literature review in Chapter 2 is divided into three major sections. I begin the chapter by discussing the literature search strategy and theoretical framework for the study. The third section includes a review and synthesis of the literature on the meaning of stress, stress in the teaching profession, and a comparison of stress in general education and special education teachers. I also provide a review of literature on collective efficacy. A general overview of collective efficacy is followed by a review of collective efficacy in the teaching profession. In addition, the final piece of this section provides an explanation of the relationships among the variables and why this study is valuable.

Literature Search Strategy

In conducting the literature search, I focused on locating research from relevant academic journals and books relating to the topic of the study. I performed the literature search primarily using the Walden University online library. Peer-reviewed journal articles related to teacher stress and collective efficacy were located using searches of

databases such as PsycARTICLES, ProQuest, PsycINFO, Academic Search Premier, Education Research, and ERIC. I reviewed sources from these databases published from 1963 to 2018. Key search terms included *stress, teacher stress*, *stress in teaching*, *teacher burnout*, *special education teacher stress*, *occupational stress*, *collective efficacy*, *teacher efficacy*, *collective teacher efficacy*, *teacher support*, and combinations thereof. The keywords from relevant articles allowed me to discover additional resources. I also reviewed non-peer-reviewed articles, published doctoral dissertations, and other applicable publications to ensure a comprehensive search.

Research articles were used that met the following selection criteria: The article or book (publication) was considered relevant to the current research inquiry; the publication was full-text and available for review online, made available by Walden University, or available from another public library; the publication had to be in English; and the publication was determined reliable as measured by the expertise of the author and the evaluating standard of the publication. Valuable search results were obtained using these criteria.

Theoretical Framework

In chapter 1, I noted that collective teacher efficacy was established using Bandura's (1977, 1986, 1997) researching regarding social cognitive theory. According to the social cognitive theory, the choices that individuals and organizations make (as a result of the actions of individuals) are affected by the strength of their efficacy beliefs (Goddard, Hoy, & Woolfolk Hoy, 2004). The persistent effort and determination with which groups choose to seek their goals are directly affected by perceptions of collective

efficacy. Thus, collective efficacy is a powerful way of representing the strong normative and behavioral effect of the culture of an organization (Goddard et al., 2004).

When the social cognitive theory is used in the field of teaching, it forecasts that the decisions that teachers make about their classroom practices are directly influenced by their sense of efficacy, the more likely they are to be persistent, overcome obstacles and persevere when facing failure. This type of resiliency has a tendency to promote innovative teaching and student learning (Goddard et al., 2004).

Klassen (2010) used the theory of collective efficacy to examine the relationship between stress and teachers' feelings about collaboration and support of their colleagues and school leaders. Klassen indicated that many teachers feel personally satisfied from the work that they do; however, their level of satisfaction declines when stress as a result of student behavior and the demands of teaching are high. Klassen suggested that the job stress of teachers may be improved "by school policies, support from colleagues and school leaders, and from a sense of collective efficacy; that is, teachers' perceptions that the school staff, as a group, can effectively; work together to improve student learning and behavior" (p. 342). Klassen indicated that studies have shown that job satisfaction is positively affected by collective efficacy.

The equity theory proposed by Adams (1963) may also explain the relationship between job stress of teachers and their perceptions of collective efficacy. The equity theory recognizes factors that may seem unnoticeable and factors that may change have an effect on employees' appraisal and view of the relationship that they have with their employer and colleagues. The foundation of this theory is based on the thought that

employers believe that employees come to be discouraged and less motivated if they feel as if they put in more than they get back. As a result, they may put forth less effort or become unhappy.

When there is a balance between what the employees put in (e.g., effort, hard work, enthusiasm, support of colleagues, demonstration of skills, etc.) and what they receive (e.g., benefits, recognition, salary, job security, advancement, etc.) employees are more likely to be motivated and a stronger and more productive relationship will exist (Adams, 1963). Given this theory, as from research regarding collective efficacy, it is likely that when teachers feel that they are putting forth more effort than their colleagues, they are not getting any recognition for what they have done, or they are not getting the support that they are giving, they will feel more stressed.

Literature Review Related to Key Variables and/or Concepts

Stress

This section is organized per the definitions of stress pertinent to the teaching profession. In this section, I examine important constructs related to stress, such as stress management, and outcomes of stress (e.g., burnout, as burnout may cause teachers to leave the teaching profession). Last, the stress levels of general education and special education teachers will be compared to provide a foundation for further examination of the variables of interest in this study.

Different people react differently to circumstances that are stressful. Some individuals thrive, while others are indifferent, and some might develop physical or psychological sicknesses over time (Farber, 2000; Holahan et al., 2005). Kipps-Vaughan

(2013) noted that numerous causes of stress can be either productive or damaging, desired or undesired, and positive or negative. Influences of an external or internal nature may result in stress and have either a positive or negative outcome on a person (Fimian, 1982).

Stress is defined in different ways by various researchers and is responded to differently by individuals. Some stress is considered to be positive stress; however, when stress becomes overwhelming and difficult to handle, changes occur to individuals' physical and mental state. Anisman and Merali (1999) defined stress in terms of a "stressor." A stressor specifies a circumstance or occurrence considered aversive given that it provokes a stress response which strains an individual's physiological or psychological resources as well as possibly triggers a subjected state of physical or mental tension (Anisman & Merali, 1999). Sarmah and Baruah (2012) defined stress as "the feeling of an individual towards any situation, problem or demand, which affect his/her physiological and psychological actions" (p. 2). Job stress, specifically, is the stress that is the result of an individual's job or profession. The authors agree that when stress increases to levels that individuals cannot manage, their mental and physical states are altered. Sarmah and Baruah noted that it is important to identify the sources of stress and separate those factors in order to eliminate or reduce the stressors.

Various forms of stress may include trauma, life changes, and ongoing stress (Holahan et al., 2005). Some events that might occur in individuals' lives and affect them include death of a friend or family member, a change in marital status, or a change in finances (e.g., loss of job; Clark et al., 2014; Holahan et al., 2005). There are some

stressors that are traumatic; the person experiencing such events has no control over them (e.g., natural disasters, war). There are other stressors that are considered continuous. These stressors consist of events or responsibilities that are ongoing (e.g., work, familial responsibility; Holahan et al., 2005). How individuals perceive the occurrences in their life can also bring about stress (Fimian, 1982).

Kyriacou (2001) defined teacher stress as events that cause a teacher to become anxious or uncomfortable while performing daily responsibilities and activities. Emotions such as frustration, anger, and/or depression may result from teachers' responsibilities. These emotions may also result in a threat to their confidence or feelings of security (Kyriacou, 2001). Stress substantially influences teachers' job satisfaction, sense of efficacy, ability to engage students, burnout and attrition rates, and physical health (Shernoff, Mehta, Atkins, Torf, & Spencer, 2011).

Stress is associated with the interactions of individuals with other individuals or their surroundings (Pearlin, 1989). Experts view stress as a trait that is relating to or dependent on a set of circumstances or situations. It can be harmful to the individual (Sutton, 1984). As a result, anxiety and tension may persist. When an individual is feeling stress, he or she may have difficulty handling a range of situations or occurrences, called stressors. Some examples of these stressors may include environment, lack of materials, working conditions, heavy workload, internal conflicts, curriculum versus time, salary, teacher role, administration, students, and parents (Swick & Hanley, 1980). Similarly, Greenberg, Brown, and Abenavoli (2016) documented four major sources of teacher stress: school organization (e.g., lack of support from administration, negative working

conditions in a school), job demands (e.g., large amounts of paperwork, heavy workloads, lack of time), work resources (e.g., limited sense of teacher independence and decision-making power), and social and emotional competence (e.g., lack of interactions with colleagues).

Unfavorable health effects may result from substantial amounts of stress. As a result of stress, the body may demonstrate an increase in the production of acid secreted in the stomach, blood pressure, and other physiological changes (Hinkle, 1973). These changes in the body are similar to those that occur when the body is exposed to pathogens or other illnesses affecting the body (Hinkle, 1973). Given these responses, for those exposed to stress for extended periods of time, stress may have lasting consequences.

Teachers' health and well-being are affected by long-term stress (Haydon et al., 2018; Katz et al., 2016). According to Michie (2002), when stress is extreme or long-lasting, an individual's health, quality of life, and personal development are threatened among other outcomes. This will lead to an individual's ability to perform for his or her organization to decrease. For example, communication skills are jeopardized, absenteeism and turnover increases, the quality and quantity of work is reduced, and job satisfaction and morale diminish. Wu et al. (2006) noted that sicknesses such as high blood pressure, musculoskeletal problems, cardiovascular disease, coronary heart disease, ulcers, gastrointestinal disturbance, changes in weight, and disturbance in the functioning of other bodily organs, are increasing as a result of stress.

The long-term effects of stress may not only lead to physical illnesses as described, but to mental illness as well. Prolonged stress may increase the possibility of

exhaustion and psychological distress. The effects of stress may also lead to burnout, and even premature death (Yang, Ge, Hu, Chi, & Wang, 2009). The authors also indicated that in addition to the physical illnesses that may result from stress, teachers are negatively impacted by strain on mental health. Anxiety, ability to manage problems, inattentiveness, withdrawal, aggression, sleep issues, depression, and other psychosomatic disorders may develop in teachers who experience stressful working conditions.

***Stress management/protective factors*.** A teacher's health and well-being, as well as their commitment to teaching is affected by the effectiveness of their coping techniques and stress management skills. Betoret (2006) found that teachers who have access to and utilize coping resources are more unlikely to experience burnout compared to teachers with less coping resources. According to Lazarus (1993), making use of coping mechanisms can reduce the effects of stressors by altering an individual's emotional state during a situation that is stressful, or by removing or reducing the stress source.

It has been noted that social support has an overall safeguarding effect on teacher stress (Greenglass, Fiksenbaum, & Burke, 1994). Building a network of individuals that one can confide in, mentors, and friends who are highly supportive are protective factors for stress reduction (Clement, 2017). Richards (2012) discovered that trusting in family and friend relationships is the most widespread method of coping with teacher stress. Having positive peer interactions was the most commonly cited protective factor from stress by Haydon et al. (2018). Specifically, being friendly, helpful, and supportive,

having a positive attitude, using direct, clear and regular communication, and being good listeners, were the skills that were noted to protect individuals from stress. Leung et al. (2009) discovered that teachers who are able to manage stress (reported high levels of stress management) also indicated that they had more resources (reported higher levels) used for coping, for example, social supports, when compared to teachers with lower stress management levels.

Developing research has indicated that social media and online communities can act as a form of social support to teachers. Deryakulu and Olkun (2007) found that emotional as well as instrumental support may be provided by online discussion forums for teachers. Online support was also studied by Leung, Chiang, Chui, Lee, and Mak (2011). They found that new teachers reported that these online communities functioned as a mode of stress management.

According to Haydon et al. (2018), efforts toward fostering health and well-being, was also noted as a protective factor against stress. For example, teachers who were involved in activities outside of school or their children's activities, those who exercised during the week, or were involved in coaching experienced less stress and had the ability to manage stress more effectively. Teachers that did not bring work home and had time to themselves, such as reading or walking alone, experienced less stress.

Droogenbroeck et al. (2014) indicated that instead of becoming stressed by external pressures, increased workload, etc., these events might cause some teachers to seek out further training and/or collaboration with other colleagues in order to cope. Positive associations with coworkers are crucial in forming common values and standards

and establish a collective goal orientation. When teachers accept support from coworkers, this can serve as a safeguard against stress. If teachers can make use of collaboration and speaking with one another about problems, in order to make data-based decisions, to enhance teaching and learning, this may generate a sense of camaraderie and understanding of each other's feelings and, as a result, prevent negative and uncaring opinions and attitudes toward their fellow teachers.

A teacher's relationship with his or her supervisor is very valuable. Droogenbroeck et al. (2014) found that school leaders are a significant function in resolving the subjection of intensification (teachers are exposed to progressively more and more to external pressures from legislators, their supervisors, parents, and other professionals). School leaders can support and enable teachers to better manage not only teaching-related workload, but also above all, their workload that is not related to teaching (for example, demands of accountability and paperwork), by increasing teachers' independence. If teachers are included in the decisions made regarding the policies of schools and continue to demonstrate positive relationships with their supervisors and coworkers it is likely that outside stressors and requirements can be recognized more easily and diminished. Stress is still experienced by teachers that are fully supported; however, only at a typical level. This level of stress does not take away from their work, their well-being, and their retention in the teaching profession (Clement, 2017).

Stress in the teaching profession. Teachers are often referenced to as having a job that is challenging and potentially exasperating (O'Donnell, Lambert, & McCarthy,

2008). Challenges and frustrations that teachers experience may cause excessive stress levels (Kyriacou, 2001). Teaching is ranked among the top six most stressful professions. Of these professions, teachers report the most discontent with job satisfaction (Johnson, et al., 2005). In their study, Duxbury and Higgins (2013) found that teachers are more likely to give an account of depression, be less dedicated to their institution, and to have a lower level of job satisfaction than other professional groups.

Teachers experience stress associated with their day-to-day work responsibilities. In this section, the literature focuses on teacher reports of stress and how the stress affects their physical and mental health, as well as teaching performance. Kyriacou (2001) defined teacher stress, specifically, as, "the experience by a teacher of unpleasant, negative emotions, such as anger, anxiety, tension, frustration or depression, resulting from some aspect of their work as a teacher" (p. 28). This definition is also the most widely used definition among other researchers. When measures of stress in education are examined, teacher experience, classroom characteristics, and the school environment play a significant part (O'Donnell et al., 2008).

Dunham (1984; as cited in Johnstone, 1989) proposed three different ways of defining stress. Each definition has distinct implications for teachers and educational leaders:

1. The engineering model proposes that stress is the burden of demand placed upon an individual, resulting in tension or deformation if the 'elastic limit' of that individual's ability is passed. According to this definition, stress is relevant to groups such as probationers, or teachers in a new environment, and

emphasizes the cause of the stress rather than the resultant symptoms of stress. Teachers are acted upon rather than being an actor.

2. The medical orientation proposes that responses to stress, be it physiological or psychological, should be the main concern. Making this a central focus may mean that one may be more apt to search for 'cures' and give too much attention to symptoms (i.e., depression, irritation, tension) rather than on what is causing the symptoms. In this case, teachers are reacting to circumstances and environments rather than acting.
3. The final approach, which is favored by Dunham, makes an effort to explore demands and reactions, in conjunction with the resources teachers use for coping. Therefore, this model of stress defines stress as interactive and situational, and negative in affect when the demands are significantly greater than the available resources.

The results of a study conducted by Richards (2012) indicated that teachers are uncertain of whether their "resources" are equivalent to their "demands". They do not always have what they need in order to handle what is required of them, and this causes them a great deal of stress.

A number of studies have presented research showing that there are elevated stress levels and emotional angst among teachers (Brunsting et al., 2014; Pedrabissi, Rolland, & Santinello, 1991; Yang et al., 2009). Teachers are occupied in multifaceted and mentally stressful positions due to insufficient personnel, poor working conditions (at times), demanding responsibilities, and great expectations from both the community and

parents. These concerns may produce a very tense condition over an extended period of time. Physical and mental health may be seriously diminished due to excessive stress and teachers' ability to work may be decreased (Wu et al., 2006).

It is common to measure the stress of teachers by utilizing self-report surveys; however, other forms of measuring teacher stress include case studies, survey interviews, and studies using physiological signs of stress (for example, heart rate, hormone levels). Kyriacou (2001) found that given questionnaires inviting teachers to rate their stress experiences at work often reveal that approximately twenty five percent of teachers consider teaching as a 'very or extremely stressful' job.

Various studies (Benmansour, 1998; Greenberg et al., 2016; Kyriacou, 2001) indicate that there are numerous sources of teacher stress. It has been noted that in general, the main sources of stress faced by teachers include the following: teaching students who are unmotivated, classroom management/ maintaining discipline, pressures of time and workload, continual change, evaluation by administrators, relationships with coworkers, confidence and position, management and administration, conflict in role and role uncertainty, changes in responsibility and/or roles, and declining workplace conditions/ poor work environments. Importantly, it should also be noted that the main sources of stress that an individual teacher is subjected to will be unique to that particular teacher and will be determined by the connections between his or her specific personality, morals, skills, and situations. There are also differences in the main causes of stress that teachers experience between countries given the characteristics of their educational system, the specific state of affairs of teachers and schools in the particular country, and

the overall existing standards and attitudes concerning teachers and schools (Kyriacou, 2001). Additional stressors in the workplace may include school safety, discontented coworkers, and unmotivated and unprepared students (Mahan et al., 2010).

Teacher stress leads to absenteeism due to illness, early retirement, and teacher turnover (Johnstone, 1989). Teacher attrition in the United States is reported to be twice as high as in high achieving countries such as Finland, Singapore, and Canada (Carver-Thomas & Darling-Hammond, 2017). Clark and Antonelli (2009) found that teachers most often abandoned the profession due to workload and stress issues. Naylor and White (2010) also found that 51.5% of teachers who took a leave of absence or left the field reported stress-related and workload issues. Jepson and Forrest (2006) suggested that work-related stress in teachers is serious and needs to be addressed. They also indicate that outcomes could lead to burnout, poor performance, depression, absenteeism, depleted satisfaction in their job, and eventually, the choice to depart the teaching profession. Given these findings, it is suggested that practicing teachers experience physical and mental conditions when subjected to negative stress, caused partly, by activities related to their profession. Therefore, it is important that teachers be trained with the skills and coping mechanisms to assist them in managing the stressful aspects of their jobs.

Comparison of stress in general and special education teachers. Teachers work with students from different cultural, linguistic, and socioeconomic backgrounds, together with students with disabilities in their classrooms. Teachers often question their ability to teach students with disabilities and believe that these students should be

learning at the same rate as their general education counterparts in the classroom. These teachers may also question the evidence-based approaches used to teach both general education students and students with disabilities. These general education teachers may also question the rate that the curriculum is taught, as well as the assessments that are given (King-Sears, 2008).

Over the years, numerous changes in special education have occurred which has resulted in stress for some teachers. Some of these changes include change in federal legislation, growing population of students with disabilities, changes in standards, and increased requirement of record keeping and paperwork (Zabel & Zabel, 2001). Educators make use of various teaching methods and techniques when working with students who have disabilities, various skill levels and needs, and fewer readiness skills (Brownell & Smith, 1993). Teachers who teach students with disabilities are subjected to several stress influences such as lack of support from parents and administration, classroom student numbers, a need for greater student guidance and assistance, student behavior, indifferent and uninterested students, and student performance and capability (Nichols & Sosnowsky, 2002).

The literature on comparisons of stress among general and special education teachers offers contradictory data concerning the volume of stress that special education teachers experience, particularly when compared to general education classroom teachers. For instance, Cherkes and Fimian (1982) gave an account of greater occupational stress in special education teachers than in general education teachers, while Kyriacou (1987) and Trendall (1989; as cited in Kokkinos and Davazoglou, 2009)

reported that special education teachers that worked in special schools described themselves as experiencing a smaller amount of stress in their work environment than their mainstream general education counterparts. Additionally, Williams and Gersch (2004) reported no difference as a whole in the overall stress level experienced by general education and special education teachers in special schools. Additional research findings from studies in the United States also indicate similar conflicting results, as some investigators reported higher levels of stress among special education teachers and others reported the opposite. Yet again, other researchers did not report differences between special education and general education classroom teachers (Billingsley & Cross, 1992).

Lazarus (2006) noted that in past studies, Greek teachers have been found to experience lower stress levels. In his study of teachers in Greece, Lazarus found that teachers reported low to moderate levels of occupational stress; however, occupational stress scores as rated by special education teachers were greater than the scores given by general education teachers. Furthermore, special education teachers seemed to experience significant worries resulting from matters relating to structural facets of their jobs. Some of the stressors that teachers reported to possibly restrict the performance of teachers included organizational structure; characteristics of duties, for instance lacking necessary information regarding what they needed to do and how to do it; poor supervision; and poor connections among fellow teachers. Lazarus (2006) reported that special education teachers are inclined to experience higher levels of occupational stress than their general education colleagues, and the differences that were reported relate to issues at the organizational level.

Embich (2001) also found that special education teachers experienced more stress than their general education colleagues. Embich noted that special education teachers experienced emotional exhaustion at a high level and depersonalization at a low level, on two out of the three subscales listed on the survey in which they completed, regardless of the kind of special education teacher. The high scores were noted to be due to role uncertainty, perceived lack of support from administration, and workload.

Mapfumo, Mukwidzwa, and Chireshe (2014) studied a group of general and special education teachers in Zimbabwe. They found that overall, both groups of teachers experienced elevated stress levels. General education teachers indicated most stress due to a lack of support from government, lack of resources, and a heavy workload. Special education teachers indicated most stress to be due to lack of resources and the time they spend on individual students. Sources of stress common to both groups were lack of support from the government, lack of resources, large classes, and a heavy workload.

Bettini et al. (2017) found that the job of special education teachers is very difficult, demanding, and even more stressful than that of general education teachers. The researchers found that workload manageability had an effect on teachers' career intentions and emotional exhaustion, revealing a relationship between job commitment and stress. In their research, they found that special education teachers experience fatigue and their work causes them a significant amount of stress, which interferes with the quality of their work.

The results of a study conducted by Billingsley and Cross (1991) indicated that many special education teachers left special education for general education teaching positions due to issues with administration such as a lack of support and cooperation. Another reason for leaving included the stress involved in working with students in special education (e.g., lack of progress and behavioral issues).

Stress outcome – burnout. When stress is not properly managed, and an individual has not been successful with managing stress effectively over an extended time period, it can cause burnout (Kyriacou, 2001). Burnout is associated with attrition and early retirement. Teachers are leaving the field early and there are teacher shortages not only in the United States, but in other countries as well (Droogenbroeck et al., 2014).

"Burnout is a persistent, negative, work-related state of psychological exhaustion that results from a misfit between personal intentions and motivations on the one hand and actual on-the-job experiences on the other" (Droogenbroeck et al., 2014, p. 99). Burnout may consist of a myriad of symptoms such as chronic fatigue, low self-esteem, depression, headaches, hypertension, etc. Burnout hinders individuals from attaining professional goals, diminishes resources for coping, and as a result becomes perpetual and difficult to recover from (Droogenbroeck et al., 2014).

Burnout is not a variable of interest in this study; however, it is critical to consider because it is a significant consequence to long-standing, relentless exposure to stress. According to Maslach, Schaufeli, and Leiter (2001) there is a link between burnout and job dissatisfaction, substance abuse, anxiety, depression, low self-esteem, and the like.

Incompetent leadership and eventually an eagerness to leave the profession, is also a result of burnout (Lazuras, 2006).

Burnout as a personal negative experience transpiring due to chronic work stress has become important in the literature geared toward teaching professionals since mid-1970. Generally, there is an opinion that teacher burnout may have a negative influence on the teachers, which may lead to emotional, as well as, physical ill-health. Students are also affected, as teachers that are burned out may be reasonably compromised in the quality of teaching and commitment that they give to their students. They may also provide less information and less commendation to their students, as well as provide less interaction with their students (Salami, 2011). Teachers may develop a feeling of being powerless to change whatever it is that is stressing them and as a result, give up (Richards, 2012).

Collective Efficacy

Collective efficacy embodies the shared beliefs of the members of a group, which suggests a high level of agreement. Collective efficacy is similar to self-efficacy and represents performance expectations of groups rather than individuals. Bandura (1986, p. 449; as cited in Jex & Thomas, 2003) introduced the term and stated that "perceived collective efficacy will influence what people choose to do as a group, how much effort they put into it, and their staying power when group efforts fail to produce results." Jex and Thomas (2003) also note that when groups have high levels of collective efficacy, the members of that group are extremely confident in the group's ability to perform its most important responsibilities and to rise above performance obstacles.

As defined in the field of sociology, collective efficacy refers to community members' ability to control other individuals' and groups behavior in the community. Individuals have a shared expectation for control. Social structure, cohesion, working trust, and mutual support all play a role in collective efficacy. Like self-efficacy is specific rather than general, the collective efficacy of a neighborhood, for example, exists relative to a specific task (Cullen, Wright, & Blevins, 2008)

The persistent effort and determination with which groups choose to seek their goals are directly affected by perceptions of collective efficacy. Thus, perceived collective efficacy is a powerful way of representing the strong normative and behavioral effect of the culture of an organization (Goddard et al., 2004). Tucker, Jimmieson, and Oei (2013) found that when a group possesses shared perceptions of competence and agency, individuals are provided with the contextual cues that give them confidence to exert personal control to cope with stressors appropriately at work. In its very nature, collective efficacy seems to be a factor in the stressor-strain process, helping individuals to manage stressors by supporting individuals in evaluating other facets of their responsibilities (e.g., control) positively, instead of negatively.

Collective efficacy in teaching. The construct of perceived collective efficacy is originated from the social cognitive theory. The choices that individuals and groups make by utilizing their capacity to act alone and to make their own free choices, is the most important assumption of the social cognitive theory. According to the social cognitive theory, the strength of one's efficacy beliefs influences the choices which individuals and organizations make. As it relates to the teaching profession, social cognitive theory

predicts that teachers' decision making regarding the methods utilized in their classrooms is directly influenced by their sense of efficacy. They are more likely to steadfastly overcome difficulties and persevere when facing failure. This type of resiliency has a tendency to promote state-of-the-art teaching and student learning (Goddard et al, 2004).

Goker (2012) described perceived collective efficacy within a school as representing, "the judgment of teachers that the faculty as a whole can organize and execute the necessary courses of action in order to have a positive effect on student learning" (p. 1545). Collective efficacy scales quantify a teacher's confidence in the ability of the entire staff to carry out or bring into effect a plan or idea. Collective efficacy is related to teacher determination and dedication. Teachers who have faith that they can accomplish a task increase their efforts when confronted with failure to attain their goals. Therefore, expectancies of achievement of intention are as powerful as actually mastering an undertaking in teachers who perceive collective efficacy (Angelle & Teague, 2014). Angelle and Teague noted that when a faculty has a strong collective efficacy, it is indicative of confidence in their ability to meet their goals and achieve what they set out to do.

Collective teacher efficacy of a school is commonly measured by averaging individual teachers' responses to a series of questions on a scale. Teachers who have stronger perceptions of collective efficacy are more apt to indicate that they agree with statements such as, "Teachers in this school have what it takes to get the children to learn" and "Teachers here are well prepared to teach the subjects they are assigned to teach." Similarly, teachers who have strong perceptions of collective efficacy are more

apt to disagree with statements like, “Students here just aren’t motivated to learn” or “Teachers in this school think there are some students that no one can reach” (Brinson & Steiner, 2007, p. 2). Schools that have high collective efficacy take responsibility for the academic outcomes of their students. Teachers in these same schools with high collective efficacy do not believe that low academic outcomes and student achievement is an unavoidable consequence of issues such as low socioeconomic status, inability, or the background of a student’s family. These teachers do their best to assist these students in achieving (Tschannen-Moran & Barr, 2004).

Goddard (2001) indicated that it looks as if beliefs of collective efficacy influences group performance by molding the behavioral and normative school environments. Bandura (1997; as cited in Goddard, 2001) noticed that, “people working independently within a group do not function as social isolates totally immune to the influence of those around them” (p. 469). Accordingly, an approach in understanding how collective efficacy influences individual teachers’ behavior is to reflect on the effect of social norms on members of a group. “From a social cognitive perspective, the power of such normative press may be understood as the effect of social persuasion on collective efficacy” (Goddard, 2001, p. 469). For example, if the majority of teachers in a school have confidence that the faculty can teach students successfully, the normative and behavioral environment will push teachers to persevere in their scholastic endeavors in order for their students to achieve to high levels.

According to Droogenbroeck et al. (2014), the strongest influence on the impact on teacher burnout seems to come from everyday interactions and relationships. The

researchers found that teachers' relationships with colleagues were directly related to emotional exhaustion (fatigue due to drained emotional energies) and cynical depersonalization (indifferent and negative attitudes toward other individuals). The support received by teachers from their colleagues can act as a safeguard against burnout. Collaborating and discussing concerns and problems at work may provoke feelings of unity and empathy, as well as thwart attitudes and feelings of indifference and negativity towards others.

Griffith, Steptoe, and Cropley (1999) surveyed 780 teachers located in London using a questionnaire. Their statistics suggested that the existence of social support as well as using successful coping responses can have an effect on a teacher's perception of stress. The authors' findings emphasize the significance of acknowledging that the level of stress that a teacher is experiencing influences a teacher's perception of what is demanded from him or her. It is also important to note that social support and ineffective coping can create a cycle by means of which the same 'objective' situation can start to seem to be not as demanding to the teacher.

Klassen (2010) indicated that teachers, who work in schools where the communication among staff is good and there is a strong sense of collaboration between colleagues, express lower stress levels and higher job satisfaction levels and commitment. The most effective way to reduce stress and to cope with job demands appears to be having good interpersonal relationships with colleagues and/or supervisors, as well as having decent social support from colleagues and/or supervisors, as well as family. Thus,

it is vital to establish and continue to have healthy social networks for sufficient social support so as to support mental health (Yang et al., 2009).

Bakker, Hakanen, Demerouti, and Xanthopoulou (2007) noted that job resources such as support from administrators and colleagues, evaluative information, and cooperative interaction among colleagues enhanced teacher motivation, particularly in schools where job demands such as misbehavior of students were high. The authors suggested that a teacher's confidence about the school staff's collective efficacy to handle the behavior of students might produce lower personal stress levels resulting from the misbehavior of students. Similarly, Klassen (2010) found that teacher's trust in collective efficacy to maintain student discipline significantly lessened the effect of job stress as a result of student behavior on job satisfaction.

Teachers' perception of workload stress does not appear to be affected by collective confidence in instructional methods. Developing the collective motivation of a school staff as a result of awareness and attention to the sources of collective efficacy – assumed as successful experiences in the past, observation of others that are successful, verbal encouragement, and group affect – may lessen the effect of teachers' stress from student behavior on job satisfaction, even amidst demanding teaching situations (Klassen, 2010).

School leaders should focus their attention to the improvement of collective teacher efficacy because there is a remarkable list of positive outcomes. Brinson and Steiner (2007) have noted that strong collective efficacy has resulted in the following outcomes: improves student performance, improves the negative effects of low

socioeconomic status, strengthens parent/teacher relationships, and establishes a work environment that fosters teacher commitment to the school.

Some specific actions that school leaders can take to improve collective efficacy among teachers are practices such as building instructional knowledge and skills by providing teachers with structured opportunities, establishing opportunities for teachers to collaborate and share their experiences and skills with each other, interpreting teacher performance results and providing feedback that can be implemented, and including teachers in decisions that affect the school (Brinson & Steiner, 2007).

Goddard et al. (2004) also indicated that when teachers have the opportunity to have an effect on school decisions that are relevant to instruction, the school is more likely to be characterized by a strong sense of collective efficacy. Decisions that are relevant to instruction for teachers to be involved in include management of curriculum, instructional materials, and activities that students participate in; communication with the parents; student placement; and policies as it relates to discipline.

Putting an emphasis on building collective efficacy can give leaders a way to accomplish the goal of helping to guarantee that teachers possess the instructional skills as well as the professional confidence that is necessary to be an effective teacher for their students (Brinson & Steiner, 2007). Goddard et al. (2004) pointed out that as educators search for methods toward school improvement that can support all students in reaching high levels of achievement, it is opportune and valuable to assess how schools can be given the power to exercise control over their situations and circumstances. The strong relationship between perceived collective efficacy and group performance can be

explained by the flexibility with which effective individuals strive to carry out given goals. Perceived collective efficacy is related to the tasks, levels of effort, steadfastness, stress levels, shared thoughts, and achievement of groups. Therefore, while the effect of teachers on students' achievement is partly explained by teachers' sense of efficacy, from an organizational viewpoint, a school faculty's sense of collective efficacy is useful in explaining the differing effects that school beliefs and values have on teachers and students. Because of this, it is sensible to believe that some schools positively influence teachers while the influence of other schools is significantly less beneficial. The sense of collective efficacy in a school can have an effect on teachers' thoughts about themselves and, consequently, their performance in teaching as well as the learning of their students.

Relationship Between Variables

Some researchers (Griffith et al., 1999; Klassen, 2010) have identified a relationship between teacher perceptions of stress and collective efficacy. Due to the findings in these studies, researchers have suggested that there is an inverse relationship between collective efficacy and stress, meaning that as collective efficacy increases, stress decreases. Furthermore, through empirical and anecdotal evidence, although early research was contradictory, researchers now propose that teaching special education students is significantly more stressful than teaching general education students.

Due to these implications, stress and collective efficacy of special education teachers, and general education teachers are being investigated together. This is a very small; however, important gap in the literature which has not yet been examined, but will perhaps aid in encouraging additional conversations among researchers in these areas, as

well as inform or improve school leaders' support of populations of teachers that need it through intervention.

Summary

In summary, the literature review provided a discussion of the meaning of stress and unfavorable outcomes related to stress physically and psychologically. Some examples of these outcomes may include increase in blood pressure other health problems, anxiety, and depression (Hinkle, 1973; Yang et al., 2009). Events that cause a teacher to become anxious or uncomfortable while performing daily responsibilities and activities is known as teacher stress (Kyriacou, 2001). Some issues that cause teacher stress include poor working conditions, salary, administration, students, and parents of students (Swick & Hanley, 1980). Burnout may also result from stress if not managed appropriately (Droogenbroeck et al., 2014). A number of studies have presented research showing that there are elevated stress levels and emotional angst among teachers (Pedrabissi et al., 1991; Yang et al., 2009).

The literature on comparisons of stress among general and special education teachers offers contradictory data concerning the volume of stress that special education teachers experience, particularly when compared to general education classroom teachers. These differences were explained. In addition, a general overview of collective efficacy was followed by a review of collective efficacy in the teaching profession. Teachers who have a strong sense of collective efficacy demonstrate less stress and higher job satisfaction (Klassen, 2010). Special education was described, and the relationships among the variables was discussed. A few studies (Griffith et al., 1999;

Klassen, 2010) have indicated that there is a relationship between teacher perceptions of stress and collective efficacy. Results of these studies lead researchers to suggest that there is an inverse relationship between collective efficacy and stress, meaning that as collective efficacy increases, stress decreases. The research hypotheses, study sample, reliability and validity information regarding the instruments used in this study, and the methods by which the research hypotheses were analyzed will be presented in Chapter 3.

Chapter 3: Research Method

Introduction

The purpose of this quantitative study was to explore whether the variable of collective efficacy has an effect on stress among elementary special education teachers compared to elementary general education teachers in South Carolina. I used the CE Scale, Short Form to determine the independent variable of collective efficacy. The dependent variable of teacher stress was measured with the TSI. The following three RQs were investigated:

RQ1. Is there a difference in stress among elementary special education teachers compared to elementary general education teachers?

RQ2. Is there a difference in stress between three levels of collective efficacy--high, average, or low--among elementary teachers?

RQ3. Is there a difference in stress based on an interaction between level of collective efficacy and level of teaching among elementary teachers?

In this chapter, I focus on three key areas, which include the research design and rationale, the methodology, and the threats to validity. First, the variables and the link between the study design and RQ are discussed. I also describe the time and resource constraints and discuss how the design was consistent with existing research in the discipline. The methodology section includes a definition of the population and sample size; procedures for recruitment, participation, and data collection; and the instrumentation and operationalization of constructs. Finally, the internal and external threats to validity in the present study, as well as ethical concerns, are discussed.

Research Design and Rationale

I used a quantitative approach to address the RQs in this study. Quantitative research is defined as "a means for testing objective theories by examining the relationship among variables. These variables can be measured, typically on instruments, so that numbered data can be analyzed using statistical procedures" (Creswell, 2014, p. 247). According to Creswell (2014), this research method is appropriate for understanding trends, opinions, and ways of thinking based on data derived from numerical scales. Denscombe (2010) identified several advantages of quantitative research. With this type of research, the researcher has the ability to separate external influences in order to produce results that are unbiased, confirm or negate a hypothesis with statistical evidence, have greater confidence than qualitative measures, and have advantages in measurement (Denscombe, 2010). Denscombe also identified some disadvantages of quantitative research, such as the quality of data that are collected. It is possible to control this disadvantage through the type of questions that are presented. Another disadvantage is some decisions that are made during quantitative data analysis can have broad effects on the kinds of findings that emerge—quantitative analysis may not be as scientifically objective as it appears to be.

The use of surveys for research was appropriate for this study. I obtained data consisting of a numeric description of trends, attitudes, or opinions among teachers. Teachers' classification (general and special education) and teachers' sense of collective efficacy were the independent variables that were investigated. Teachers' stress level was the dependent variable.

The qualitative research approach was not suitable for this study. Qualitative research involves collecting data in the settings of participants and analyzing the data inductively (Creswell, 2014). Qualitative researchers construct themes based on the data received and then interpret the meaning of that data. Psychometrically sound instruments are not used in the collection of data using the qualitative method, and variables, such as the ones present in this study, are not elements of qualitative designs (Creswell, 2014).

Given the information presented, a quantitative approach was most appropriate for this study. Denscombe (2010) noted that a researcher should chose his or her research design according to which method is suited to the task at hand, and decisions should be made according it usefulness. Survey research and the use of quantitative data best suited my research needs. The use of Internet surveys eliminated the turnaround time of sending out a questionnaire and receiving completed responses.

Methodology

Population

The target population for the present study included public school elementary level general and special education teachers within the state of South Carolina. According to the United States Department of Labor, Bureau of Labor and Statistics (2018), South Carolina public schools were comprised of 24,190 general education elementary level teachers and 3,010 special education elementary level teachers in 2018. The target sample size for this study was 158, given an alpha of 0.05, power at 0.80, and a medium effect size at 0.25 (explained in more detail in the following section).

Sampling and Sampling Procedures

I used convenience sampling as the sampling method for this research study. According to Creswell (2009), this method is utilized when it is not reasonable to collect a random sample from the population of interest in its entirety. Researchers also use a convenience sample when all members of the population do not have an equal opportunity to be selected (Creswell, 2009). I recruited teachers using posts to my Facebook page and to Facebook teacher groups (see Appendix A for the recruitment flyer). To be eligible as a participant in this study, a respondent must have been either a general or special education public elementary teacher who had been in the teaching profession for at least three full years and was currently teaching within the state of South Carolina. Demographic information was collected to include gender and years of public school teaching experience.

I used G*Power 3 statistical software to determine the sample size. A priori analysis for ANOVA was run as to determine the effect size. An analysis was run with the alpha at 0.05, power at 0.80, a medium effect size at 0.25, numerator df = 2, and number of groups at 2. The analysis indicated that a minimum sample size of 158 should be used. The power analysis calculator used to determine my sample size was obtained online as a free download (CNET, 2008). The level of significance (alpha value) used for this study was 0.05, representing a confidence level of 95%, which is the most conventional setting used for level of significance (Kim, 2015).

To verify the sample size minimum, I conducted another power analysis using the Raosoft (http://www.raosoft.com/samplesize.html) website calculator. The suggested

sample size of $n = 96$ for general education teachers and $n = 94$ for special education teachers was computed by the Raosoft calculator for a +/- 10% error rate, a 95% confidence level, a 50% distribution rate, and total population size of 24,190 general education teachers and 3,010 special education teachers. The formula for the calculation from the Raosoft website is as follows: $n = N\ x/((N - 1)\ E^2 + x)$.

Procedures for Recruitment, Participation, and Data Collection

Before any data collection occurred, I submitted an Institutional Review Board (IRB) application with all supporting documentation to Walden University's IRB with the purpose of ensuring the safety of the participants of the study. The application to the IRB was comprised of the RQs, the data collection tools (the two survey measures), conflict of interest and recruiting procedures, a description of the participants, possible risks and benefits of this study, an explanation of how the data will be kept confidential, and informed consent procedures.

The procedures for recruitment of study participants for this study involved posting to my Facebook page and to Facebook teacher groups consisting of South Carolina teachers. I included the online link to the survey in these posts. Online surveys were submitted via the online site Survey Monkey (surveymonkey.com). Survey Monkey did not have access to the identity of participants, as participants did not provide this information. The completion time for the surveys was, on average, approximately 10 to 15 minutes. There were no required debriefing procedures or exit counseling for this study. Follow-up procedures were not set up due to the anonymous nature of the survey,

which restricted the demographic information of the individuals who completed (or did not complete) the survey.

Informed consent. Informed consent was provided at the beginning of the survey. The informed consent described my position as the researcher, the purpose of my research study, an explanation of the role of the potential participant in the research study, and information regarding the voluntary basis of the potential participant. The informed consent stated that participants could withdraw from the study at any time prior to submission of the survey. It indicated that once the survey was submitted, withdrawal from the study was not possible due to the anonymity of the survey and study. The privacy of the data that was collected was also explained, as well as my contact information for assistance or questions about the study were provided.

Instrumentation and Operationalization of Constructs

Teacher Stress Inventory. I used the TSI (Fimian, 1984) in this study to assess teacher's stress levels (the dependent variable). The TSI measures teacher's stress levels with five levels that range from 1 (*not noticeable*) to 5 (*extremely noticeable*). There is also a stress frequency scale that ranges from 1 (*never*) to 7 (*everyday*). The TSI is a 49-item, 10-factor instrument that measures the extent to which American teachers from public schools experience occupational stress. The alpha reliability for special education teachers was .93. The reliability for general education teachers was .92. The alpha reliability for the combined sample (special and general education teachers) was .93 (Fimian, 1988). Fimian and Fastenau (1987) identified five stress sources and five stress manifestation factors: Time Management, Work-Related Stressors, Professional Distress,

Discipline and Motivation, Professional Investment, Emotional Manifestations, Fatigue Manifestations, Cardiovascular Manifestations, Gastronomic Manifestations, and Behavioral Manifestations. The authors indicated that these terms collectively define "teacher stress".

Convergent validity of the TSI was established in a number of ways. First, the TSI scores of teachers were correlated with ratings that were made independently by someone who had a personal relationship with and great knowledge of the teacher. Next, overall TSI scores were correlated with the existence of specific professional and personal attributes, which were hypothesized to have very low correlation with the TSI scores. Lastly, the TSI scores were correlated with instruments that measure a variety of physiological, psychological, and organizational constructs that had previously been hypothesized to be associated with stress. Together, the three series of correlations offer evidence regarding the validity of the TSI (Fimian, 1988).

Collective Efficacy Scale. I used the CE Scale, Short Form (Goddard, 2002) to measure the independent variable teacher collective efficacy. The CE Scale, Short Form, is a 12-item Likert scale that asks questions related to students, teachers, and schools. The scale responses range from 1 (*strongly disagree*) to 6 (*strongly agree*).

The initial CE Scale was a 21-item, six-point Likert scale developed by Goddard, Hoy, and Woolfolk (2000), who modified previously used scales and field tested and pilot tested the items. The results from the pilot study indicated that the 21-item scale represented a valid and reliable measure of collective efficacy. Goddard et al. went on to test the criterion-related validity, predictive validity, and reliability of scores on the CE

Scale in a broader sample. Results indicated that all of the items loaded strongly on a single factor and explained 57.89 percent of the item variation. The alpha coefficient of reliability was strong (alpha coefficient of reliability = 0.96). Given the results it is evidenced that the collective teacher efficacy scale utilized in their study is valid.

Goddard (2002) later developed and tested a shorter version of the Collective Efficacy Scale that contained only 12 items. The psychometric properties of this 12-item short form were discovered to be equal to that of the 21-item long form, which showed strong validity and reliability (Goddard, 2002). The scores from both scales were highly correlated (r = .983), which suggested only small change resulted from removing close to 43% of the scale items (from 21 to 12 items). The high correlation suggested that the 12-item short form was measuring the same properties as the original scale (Goddard, 2002).

I categorized the results of the Collective Efficacy Scale into three levels--high, average, and low efficacy--according to the scoring key and recommended practice by the scale authors (Goddard et al., 2000), to determine three groups for analysis. First, all the completed Collective Efficacy scales are scored (some items reverse scored). Next, the average item score for each of the 12 items should be computed. The average is computed by calculating the sum of all individual scores and dividing by the number of teachers in the sample. The average item scores for the 12 items are summed and then divided by 12. The average collective efficacy score for the sample will be between 1 and 6. Next, standardized scores (SdS) for the CE Scale should be computed. In order to get this number, the difference between the sample's average collective efficacy (CE) score and the mean for the normative sample should be computed; the difference is multiplied

by 100; the product should be divided by the standard deviation of the normative sample; then 500 should be added to the result. The formula used to obtain these scores is as follows: SdS for CE = 100 (X – 4.1201)/.6392 + 500. Finally, the resulting standard scores are used to determine the categories: Scores 200 to 400 are in the low range, indicating scores between 99 percent and 84 percent lower than the normative sample; standard scores 401 to 599 fit in the average range; and standard scores from 600 to 800 are in the high range, indicating the scores are between 84 percent and 99 percent higher than the normative sample.

Demographics. I also included a demographic section at the end of the survey. This section included information about the participants. Information about sex, age, number of teaching years, highest degree, and whether they teach general or special education was collected. Obtaining this information ensured that the participants met the criteria for participating in the study.

Data Analysis Plan

I analyzed data using SPSS statistical software. Initially, the data were assessed for any missing values. Any participants who did not complete the entire instrument and demographic questionnaire were removed. The calculated scores of the instruments were also examined for outliers, and any identified outliers were removed.

Following data cleansing, I examined whether the assumptions for analysis of variance (ANOVA) were met and conducted an analysis using ANOVA to address the RQs and associated hypotheses, which were as follows:

RQ1. Is there a difference in stress among elementary special education teachers compared to elementary general education teachers?

$H_0$1. There is no difference in stress among elementary special education teachers compared to elementary general education teachers.

$H_1$1. There is a difference in stress among elementary special education teachers compared to elementary general education teachers.

RQ2. Is there a difference in stress between three levels of collective efficacy--high, average, or low--among elementary teachers?

$H_0$2. There is no difference in stress between the three levels of collective efficacy--high, average, or low--among elementary teachers.

$H_1$2. There is a difference in stress between three levels of collective efficacy--high, average, or low--among elementary teachers.

RQ3. Is there a difference in stress based on an interaction between level of collective efficacy and level of teaching among elementary teachers?

$H_0$3. There is no difference in stress based on an interaction between level of collective efficacy and level of teaching among elementary teachers.

$H_1$3. There is a difference in stress based on an interaction between level of collective efficacy and level of teaching among elementary teachers.

I ran a 2x3 ANOVA test to determine the significance, if any, between total scores for the groups. Significance was set at $p = < .05$. The characteristics of participants (e.g., age, gender, number of years teaching) were represented by descriptive statistics with frequencies and percentages identified.

Threats to Validity

Internal Validity

Internal validity questions whether or not the manipulated variable caused whatever changes that are seen in the dependent variable or whether or not there is another explanation (Salkind, 2010). According to Campbell, Stanley, and Gage (1963) several variables can be considered threats to the internal and external validity of research. Rather than focusing on whether one variable caused a change in another variable, my study focused on if there were significant differences between two groups. In spite of this, threats to validity have been considered in order to help understand the findings. Two factors that jeopardize internal validity, History and Mortality, were discussed in detail in the assumptions section in Chapter 1.

External Validity

External validity refers to how the findings of research are generalized (Campbell et al., 1963; Salkind, 2010). In my research, limiting the population for this study to elementary teachers in the state of South Carolina reduced the generalizability of the results, thereby limiting external validity. Nevertheless, the results that I obtained can be used as baseline data for future research.

Ethical Procedures

It is my understanding that I have a duty to maintain ethical research procedures and eliminate potentially harmful effects experienced by the participants such as negative responses, psychological effects, or physical harm. In order to uphold ethical standards, prior to obtaining consent, I ensured that potential participants were informed of the

purpose of the research, any potential benefits and potential harm, and provided the potential participants with any information that may have influenced their willingness to participate in the study. This information was presented in written form and was required to be accepted before being able to proceed with the survey. My contact information was provided in case potential participants had questions regarding the study prior to completing the survey.

Prior to collecting any data, I obtained approval from the Walden University IRB. I did what was required by the IRB in order to ensure the protection of study participants. Survey research methodology was used in this research study; therefore, there was minimal risk for participants. Participants were able to choose to discontinue completion of the survey at any time.

The survey questionnaire used in this research study was anonymous; therefore, the identity of participants was protected because the data that were recorded can never be linked to the respondent who supplied it. This eliminated any need for confidentiality of responses. Because the survey did not include open-ended questions and did not solicit any information that is considered protected, no unintended disclosure of confidential information was expected. No information unrelated to this study was sought.

Any individual under the age of 18 years old did not complete the survey; therefore, the potential to interact with protected groups of individuals was eliminated. It is assumed that because the nature of the survey questionnaire was anonymous, undue influence on the responses of participants was eliminated as well.

The data that were collected are stored in a password-protected file on my computer, and on a flash drive and locked in a fireproof box in my home. Any printed copies of data are also stored in this box. This data will remain in the box for five years. After five years has passed, the printed data will be shredded, and that data on the flash drive and computer file will be deleted.

Summary

In this chapter, the methodology that was utilized for this study was provided. The research design and rationale were introduced. The RQs and hypotheses were again presented. The population, setting, and sample for the study were reviewed, including the eligibility criteria for participants. The TSI and CE Scale, Short Form, were identified and described, in addition to the modifications that were necessary to employ this study. Data collection procedures were described and data analysis procedures to include ANOVA analysis were explained. Ethical procedures were also addressed. The results of this study will be presented in Chapter 4.

Chapter 4: Results

The purpose of this quantitative study was to explore whether collective efficacy had an effect on stress among elementary special education teachers compared to elementary general education teachers in South Carolina. I designed the study to examine the effect of elementary teachers' classification (general or special education) and sense of collective efficacy on their stress level. A three-part survey was used to measure collective efficacy and stress levels of 207 elementary teachers who work in South Carolina. The specific RQs and hypotheses for this study were the following:

RQ4. Is there a difference in stress among elementary special education teachers compared to elementary general education teachers?

$H_0$1. There is no difference in stress among elementary special education teachers compared to elementary general education teachers.

$H_1$1. There is a difference in stress among elementary special education teachers compared to elementary general education teachers.

RQ5. Is there a difference in stress between three levels of collective efficacy--high, average, or low--among elementary teachers?

$H_0$2. There is no difference in stress between the three levels of collective efficacy--high, average, or low--among elementary teachers.

$H_1$2. There is a difference in stress between three levels of collective efficacy--high, average, or low--among elementary teachers.

RQ6. Is there a difference in stress based on an interaction between level of collective efficacy and level of teaching among elementary teachers?

$H_0$3. There is no difference in stress based on an interaction between level of collective efficacy and level of teaching among elementary teachers.

$H_1$3. There is a difference in stress based on an interaction between level of collective efficacy and level of teaching among elementary teachers.

This chapter includes the results of the data analysis that I conducted to address the RQs and hypotheses. In the chapter, I describe the data collection and demographic characteristics of the sample. Then, the results of the data analysis are presented. This section includes tables illustrating the statistical results. The chapter concludes with a summary.

Data Collection

The research survey consisted of three parts. The first part was the CE Scale, Short Form (Goddard, 2002), which measured teachers' sense of collective efficacy (see Appendix B). The second part was the TSI (Fimian, 1984), which measured the stress levels of teachers. Also included as part of this survey was a demographic questionnaire that addressed the independent variable teacher classification, as well as participating teachers' age, sex, number of years in teaching, and most advanced degree (see Appendix C). Appendices D and E contain documentation of permission to use the CE Scale, Short Form, and TSI, respectively.

After receiving the IRB approval letter (no. 07-19-19-0344751), I made the survey (created with Survey Monkey) live and posted the survey link and recruiting invitation (see Appendix A) to Facebook. Data were collected for this analysis between the dates of July 19, 2019 and December 15, 2019. During this time, the survey was

posted to my Facebook timeline as well as to the following private Facebook groups for teachers: Aiken County SC for Ed. (859 members), Beaufort Area SC for Ed. (859 members), Charleston SC for Ed. (2,936 members), Dorchester/Berkeley Corridor SC for Ed. (868 members), Greenville & Western Upstate SC for Ed. (1,940 members), Lexington County SC for Ed. (783 members), Midlands SC for Ed. (2,860 members), SC for Ed. (30,292 members), Special Education SC for Ed. (585 members), and York Area SC for Ed. (1,403 members). I made weekly postings to these groups until I obtained the needed sample size (94 special education and 96 general education teachers). A total of 207 elementary teachers (112 general education teachers and 95 special education teachers) in South Carolina completed the survey in its entirety. One participant was disqualified because of declined informed consent (the participant clicked *no* for the statement of consent question and the survey was discontinued). Fifteen participants were disqualified because they indicated that they were not an elementary teacher in South Carolina. Ninety-three surveys were incomplete.

Descriptive Statistics

Tables 1 and 2 show descriptive statistics for the categorical demographic variables. Demographic questionnaire items included teachers' distribution according to teacher classification, gender, age, years of teaching, and most advanced degree. Teachers' distribution among gender and age groups are presented in Table 1.

Table 1

Descriptive Statistics for Categorical Demographic Variables Gender and Age

Classification	Gender	*n*	%
General education	Male	5	4.5

	Female	107	95.5
Special education	Male	3	3.2
	Female	91	96.8
	Age	*n*	%
General education	18-24	1	0.9
	25-34	32	28.8
	35-44	34	30.6
	45-54	35	31.5
	55-64	7	6.3
	65+	2	1.8
Special education	18-24	0	0
	25-34	15	15.8
	35-44	37	38.9
	45-54	31	32.6
	55-64	11	11.6
	65+	1	1.1

As shown in Table 1, the largest proportion of participants indicated their gender as female (*n* = 107, 95.5% - general education; *n* = 91, 96.8% - special education). Participating teachers represented themselves in one of six age groups. The majority of participants fell within the age range of 45-54 in the general education group (*n* = 35, 31.5%) and within the age range of 35-44 in the special education group (*n* = 37, 38.9%). The smallest age group represented by both general education and special education teachers was 18-24 (*n* = 1, 0.9% general education; *n* = 0, 0% special education teachers). In Table 2, the years of teaching experience and the educational background of teachers in this study are presented.

Table 2

Descriptive Statistics for Categorical Demographic Variables Number of Years Taught and Most Advanced Degree

Classification	Years taught	*n*	%

General education	3-5	16	14.3
	6-10	27	24.1
	11-15	18	16.1
	16-20	26	23.2
	21-25	12	10.7
	26-30	6	5.4
	30+	7	6.3
Special education	3-5	5	5.3
	6-10	18	19.1
	11-15	26	27.7
	16-20	16	17.0
	21-25	13	13.8
	26-30	11	11.7
	30+	5	5.3
	Degree	*n*	%
General education	Bachelor's	26	23.2
	Master's	63	56.3
	Master's +30	16	14.3
	Specialist	5	4.5
	Doctorate	2	1.8
Special education	Bachelor's	15	15.8
	Master's	34	35.8
	Master's +30	39	41.1
	Specialist	3	3.2
	Doctorate	4	4.2

As shown in Table 2, the majority of participants in the general education group (*n* = 27, 24.1%) had 6-10 years of teaching experience while most participants in the special education group (*n* = 26, 27.7%) had between 11 and 15 years. The most advanced degree obtained by the majority of general education teachers was a master's degree (*n* = 63, 56.3%). For special education teachers, it was a master's +30 (*n* = 39, 41.1%). A master's +30 degree represents 30 semester hours of graduate credit more than the master's degree with 21 hours of the graduate credit in one area of concentration

(South Carolina Department of Education, 2020). All coursework must be earned within a 7-year time frame.

Data Analysis Results

I analyzed study participants' answers to the study survey using the SPSS software program. To answer the three RQs, a two-way ANOVA statistical procedure was used for hypothesis testing. A post hoc test was performed for statistically significant findings to clarify the significant differences between groups.

Tests of Assumptions

The application of ANOVA in this study required testing ANOVA assumptions to ensure the validity of the study results. Levene's Test for Equality of Error Variances was used to verify the assumption that the error variance of the dependent variable was equal across groups. The hypothesis that the group variances were equal was tested. As a result, I failed to reject the null hypothesis at the 0.05 level because the test of homogeneity of variance of the used data was not significant (F (5, 201) = 1.01, p = .41). This indicates that this assumption met the application of the ANOVA test.

Results of ANOVA

A two-factor (2x3) Analysis of Variance was conducted to evaluate the effect of general education versus special education teachers and their sense of collective efficacy (high, average, low) on their stress levels. In this study, the results indicated a significant difference of elementary teachers' sense of collective efficacy on their stress level; F (2, 201) = 20.42, $p < .001$. These results indicate that 16.9% of variance in the dependent variable can be attributed to teacher's collective efficacy. The results indicated no

significant difference with elementary teacher classification (general education versus special education) on their stress levels; F (1, 201) = .07, p = .79. Finally, results indicated that there was no significant interaction effect of elementary teachers' sense of collective efficacy and their classification on their stress levels; F (2, 201) = 2.10, p = .13. These results are presented in Table 3.

Table 3

Analysis of Variance Between Teacher Classification and Their Sense of Collective Efficacy

Source	Sum of squares	*df*	Mean square	*F*	Sig.	Partial eta squared
Collective efficacy (CE)	15.112	2	7.556	20.419	.000	.169
Teacher classification	.027	1	.027	.072	.788	.000
CE * teacher classification	1.550	2	.775	2.095	.126	.020
Error	74.381	201	.370			
Total	1875.784	207				
Corrected total	92.094	206				

Research Question 1. In Table 4, participants' stress level means (TSI) and standard deviation for each teacher classification are presented. Teachers' stress levels were M = 3.01, SD = .70 for general education teachers, and M = 2.85, SD = .62 for special education teachers. From the analysis I discovered that there were no significant differences between general and special education teachers in their stress levels (F (1, 201) = .07, p = .79). From this finding, I concluded that I failed to reject the null hypothesis for hypothesis 1, and there is no difference in stress among elementary special education teachers compared to elementary general education teachers (see Figure 1).

Table 4

Descriptive Statistics for TSI Scores by Teacher Classification

Classification	*M*	*N*	*SD*
General education	3.0104	112	.7037
Special education	2.8471	95	.6167
Total	2.9354	207	.6686

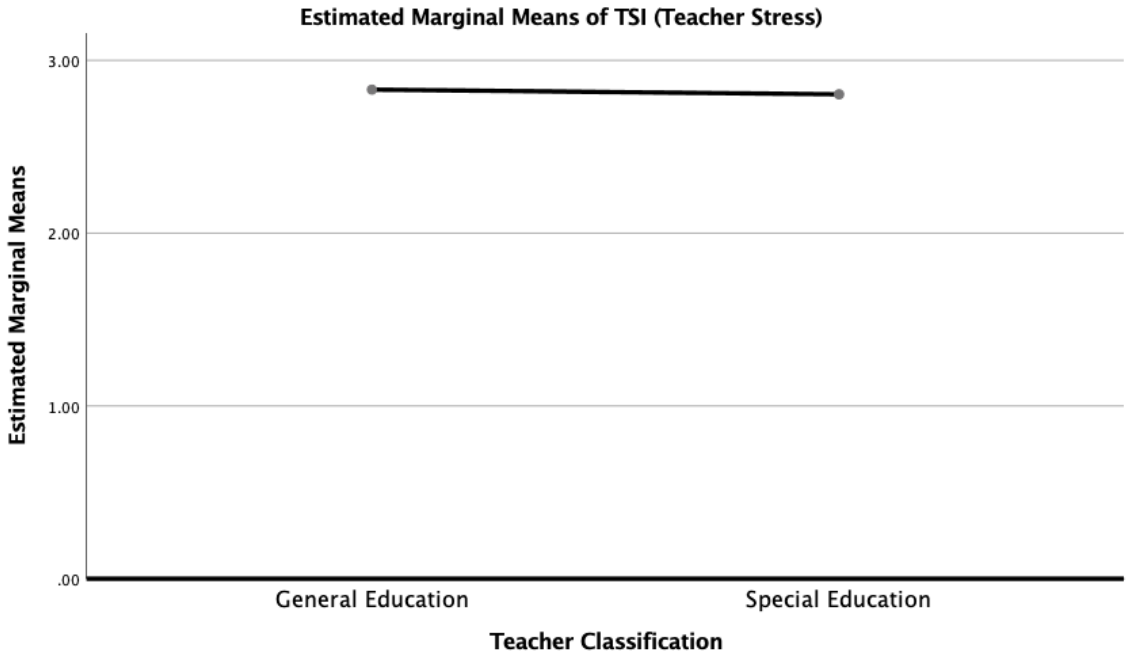

Figure 1. Estimated marginal means of teacher stress levels on teacher classification.

Research Question 2. In Table 5, teachers' TSI scores in relation to their level of collective efficacy are presented. (The results of the CE Scale, Short Form, were categorized into three levels--high, average, and low efficacy--according to the scoring key and recommended practice by the scale authors, to determine three groups for analysis; see details in Chapter 3.) Similar mean scores were observed for teachers with

low collective efficacy (M = 3.33, SD = .58 for general education teachers; M = 3.13, SD = .64 for special education teachers); teachers with average collective efficacy (M = 2.96, SD = .66 for general education teachers; M = 2.75, SD = .57 for special education teachers); and teachers with high collective efficacy (M = 2.20, SD = .63 for general education teachers; M = 2.53, SD = .46 for special education teachers). Test statistics for differences and information regarding significance are listed and noted below.

Table 5

Descriptive Statistics for TSI Scores by Level of Collective Efficacy

Level of Collective Efficacy	Classification	*M*	*N*	*SD*
Low	General education	3.3254	40	.57947
	Special education	3.1303	32	.64222
	Total	3.2387	72	.61160
Average	General education	2.9616	60	.65912
	Special education	2.7540	49	.57262
	Total	2.8683	109	.62755
High	General education	2.2045	12	.62810
	Special education	2.5256	14	.46323
	Total	2.3774	26	.55841

ANOVA results indicated a significant difference of elementary teachers' sense of collective efficacy on their stress level; therefore, a post hoc test using a Bonferroni test was conducted to differentiate the significant group means. The results indicated that teachers with low collective efficacy showed higher stress levels than did teachers with average collective efficacy (M difference = .370, $p < .001$) and teachers with high collective efficacy (M difference = .863, $p < .001$). Results also indicated that teachers with average collective efficacy showed higher stress levels than did teachers with high collective efficacy (M difference = .493, p = .001; Table 6). From these findings, I

concluded that the null hypothesis for hypothesis 2 is rejected and there is an effect of teachers' level of collective efficacy on their stress levels (see Figure 2).

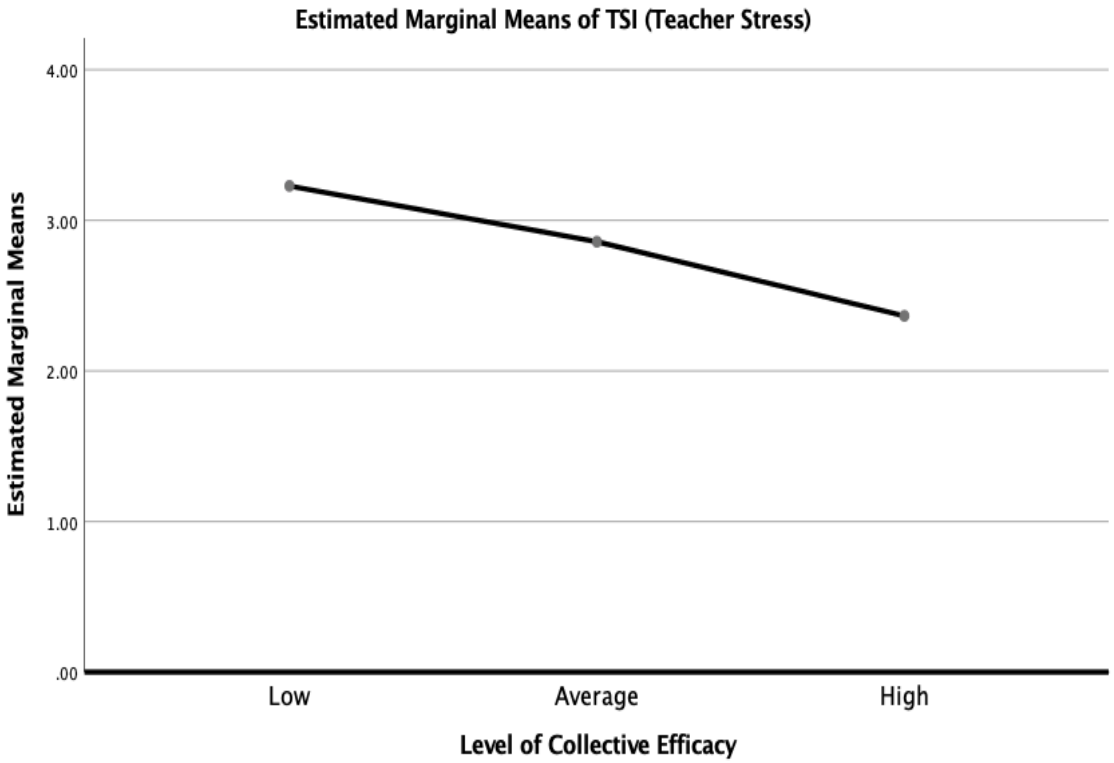

Figure 2. Estimated marginal means of teacher stress levels on level of collective efficacy.

Table 6

Bonferroni Test: Dependent Variable: TSI

(I) Collective efficacy	(J) Collective efficacy	Mean difference (I-J)	Std. Error	Sig.
Low	Average	.370*	.093	.000
	High	.863*	.140	.000
Average	Low	-.370*	.093	.000
	High	.493*	.133	.001
High	Low	-.863*	.140	.000
	Average	-.493*	.133	.001

Research Question 3. In Table 3, results showed that there was no significant interaction found between teachers' classification (general education vs. special education) and teachers' level of collective efficacy (low, average, high) on their stress levels. Therefore, I failed to reject the null hypothesis (see Figure 3).

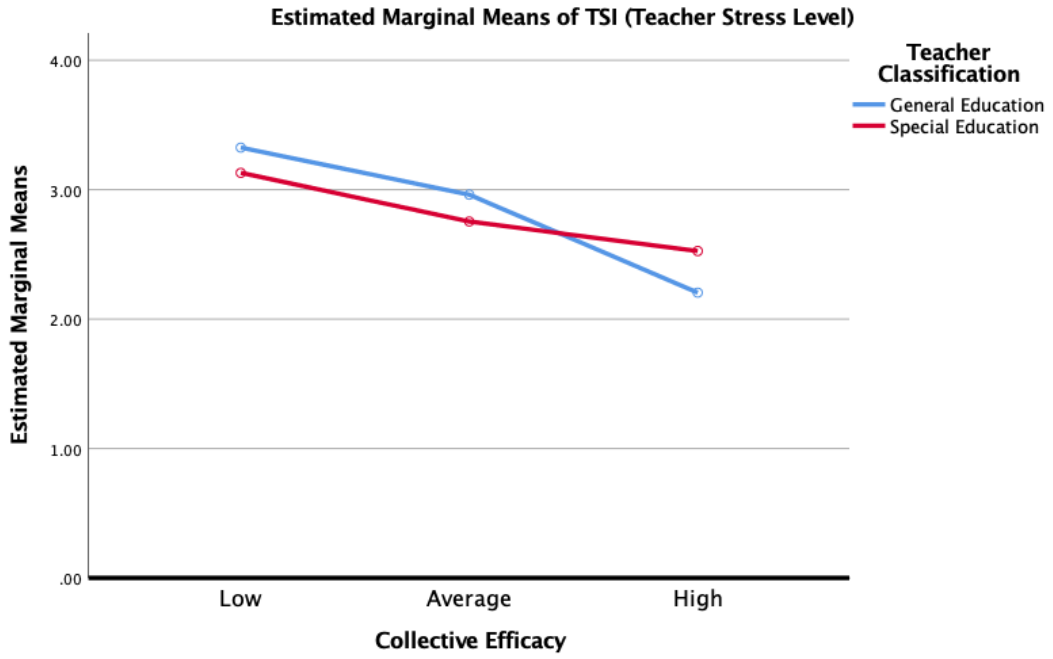

Figure 3. Interaction between teacher classification and level of collective efficacy on stress levels.

Summary

This chapter contained the results of the data analysis that I conducted to address the RQs. I asked the following RQs:

RQ1. Is there a difference in stress among elementary special education teachers compared to elementary general education teachers?

RQ2. Is there a difference in stress between three levels of collective efficacy--high, average, or low--among elementary teachers?

RQ3. Is there a difference in stress based on an interaction between level of collective efficacy and level of teaching among elementary teachers?

I collected data from 112 general education elementary teachers and 95 special education elementary teachers in South Carolina. Research surveys consisted of three parts: the CE Scale, Short Form, TSI, and a demographic section. No difference was found between general and special education teachers in their stress levels. However, there was an effect of teachers' level of collective efficacy on their stress levels. Teachers with low collective efficacy showed higher stress levels than did teachers with average collective efficacy and teachers with high collective efficacy. Results also indicated that teachers with average collective efficacy showed higher stress levels than did teachers with high collective efficacy. Lastly, there was no significant interaction found between teachers' classification (general education vs. special education) and teachers' level of collective efficacy (low, average, high) on their stress levels. In Chapter 5 of this study, the findings are summarized, conclusions are drawn, and recommendations are made. An interpretation of the findings is included, as well as implications for social change, and recommendations for action and further study.

Chapter 5: Discussion, Conclusions, and Recommendations

Introduction

I designed this quantitative study to examine the effect of elementary teachers' classification (general education vs. special education) and their levels of collective efficacy (low, average, or high) on their stress levels. Klassen (2010) noted that a feeling of collective efficacy (shared beliefs that teaching faculty will have positive effects on students) might have a beneficial impact on the way teachers experience stress. In reviewing the literature, I found that few studies have been conducted on the link between teacher collective efficacy and job stress and it was unknown whether special education teachers' experience effects of collective efficacy on stress to the same extent as general education teachers. I addressed this literature gap by examining the role of collective efficacy and comparing the effects of stress levels between general education and special education teachers, as well as determining the difference between effects in both groups of teachers.

In this quantitative study, I measured elementary teachers' stress levels according to teacher classification and collective efficacy by using the CE Scale, Short Form (Goddard, 2002) and the TSI (Fimian, 1984). The data were coded and analyzed with SPSS using a 2x3 factorial ANOVA for statistical analysis. According to the findings in this study, both general education and special education teachers demonstrated similar levels of stress. However, in all teachers, the higher the level of collective efficacy, the lower the teachers' stress level. In this chapter, I further discuss the results presented in

Chapter 4, as well as the limitations of the current study, recommendations for further studies, and implications for social change.

Interpretation of the Findings

In this section, I will summarize the results according to the RQs. I will then discuss how the findings connect to the literature and to the theoretical framework for the study.

Research Question 1

The first RQ asked, Is there a difference in stress among elementary special education teachers compared to elementary general education teachers? Given the results of this study, I failed to reject the null hypothesis. Contrary to what I expected, in the data analysis of RQ1, no significant difference between general and special education teachers' stress levels was found.

The literature on comparisons of stress among general and special education teachers offers contradictory data concerning the volume of stress that special education teachers experience, particularly when compared to general education classroom teachers. The results from this study align with studies in which researchers examined the stress levels of both general education and special education teachers, finding no differences (e.g., Billingsley & Cross, 1992; Mapfumo et al., 2014; Willams & Gersch, 2004). Williams and Gersch (2004) reported no difference in the overall stress level experienced by general education and special education teachers in special schools. Other researchers also did not report differences between special education and general education classroom teachers (Billingsley & Cross, 1992). Mapfumo et al. (2014) studied

a group of general and special education teachers in Zimbabwe and found that, overall, both groups of teachers experienced elevated stress levels.

The overall elevated stress levels by both groups of teachers mentioned in different studies related to different factors. For example, Bettini et al. (2017) found that workload manageability had an effect on teachers' career intentions and emotional exhaustion, revealing a relationship between job commitment and stress. They found that special education teachers experience fatigue and their work causes them a significant amount of stress, which interferes with the quality of their work (Bettini et al., 2017). Mapfumo et al. (2014) noted that general education teachers indicated that most of their stress was due to a lack of support from government, lack of resources, and a heavy workload. Special education teachers indicated most stress to be due to lack of resources and the time they spend on individual students (Mapfumo et al., 2014). Sources of stress common to both groups were lack of support from the government, lack of resources, large classes, and a heavy workload (Mapfumo et al., 2014). Lazarus (2006) found that some of the stressors that teachers reported included organizational structure; characteristics of duties, for instance lacking necessary information regarding what they needed to do and how to do it; poor supervision; and poor connections among fellow teachers. Although no significant difference between general and special education teachers' stress levels was found, given this research, both groups of teachers experience stress as a result of their profession.

Research Question 2

Collective efficacy represents the shared beliefs of the members of a group. Collective efficacy is similar to self-efficacy and represents performance expectations of groups rather than individuals (Goker, 2012). In terms of teachers, collective efficacy is the belief that the school staff as a whole can work together to have a positive effect on the learning of students (Goker, 2012). Jex and Thomas (2003) noted that when groups have high levels of collective efficacy, they are extremely confident in the group's ability to perform its most important responsibilities and to rise above performance obstacles.

The second RQ asked, Is there a difference in stress between three levels of collective efficacy--high, average, or low--among elementary teachers? Given the findings of this study, the null hypothesis is rejected. In the data analysis of RQ2, the values for general education and special educations teachers were observed to be similar in each category of collective efficacy. The main finding showed a significant effect of elementary teachers' level of collective efficacy (high, average, and low) on their stress levels. Results showed that the higher the collective efficacy, the lower the stress level and vice versa. Results were significant and indicated that teachers with low collective efficacy showed higher stress levels than did teachers with average collective efficacy and teachers with high collective efficacy. Significant results also indicated that teachers with average collective efficacy showed higher stress levels than did teachers with high collective efficacy.

Study findings were consistent with literature regarding the stress levels of teachers as it relates to their level of collective efficacy. Researchers have suggested that

there is an inverse relationship between collective efficacy and stress, meaning that as collective efficacy increases, stress decreases (Griffith et al., 1999; Klassen, 2010). The results of the survey conducted by Griffith et al. (1999) suggested that the presence of social support as well as making use of effective coping responses could have an effect on a teacher's perception of stress. Klassen (2010) found that teachers who work in schools where communication between staff is good, and where a strong sense of collaboration between colleagues exists, report lower stress levels as well as higher job satisfaction. Furthermore, Yang et al. (2009) reported that having good interpersonal relationships with colleagues and/or supervisors, as well as having reasonable social support from colleagues and/or supervisors and family, appears to be the most effective way to reduce stress and cope with job demands.

Research Question 3

The third RQ asked, Is there a difference in stress based on an interaction between level of collective efficacy and level of teaching among elementary teachers? The null hypothesis was not rejected. In the data analysis of RQ3, no significant interaction was discovered between teachers' classification (general education vs. special education) and teachers' level of collective efficacy on their stress levels. General education and special education teachers' levels of stress were similar for each level of collective efficacy (low, average, and high). Few studies have been done that examine the link between teacher collective efficacy and job stress, and previous researchers had not specified differences in how collective efficacy benefits general education versus special education teachers. My initial thoughts were that special education teachers may benefit more from having a

sense of collective efficacy (because some researchers, such as Billingsley and Cross, 1991, Embich, 2001, and Lazuras, 2006, indicated that special education teachers may experience more stress than general education teachers). In finding that overall stress levels were similar between general education and special education teachers in this study, I now believe that collective efficacy effects stress levels in the same manner between both groups.

Interpretation of the Findings in Relation to Theoretical Framework

Three theories were used as a basis for this research study. According to the social cognitive theory (Bandura, 1977, 1986, 1997), the strength of one's efficacy beliefs influences the choices which individuals and organizations make. The theory of collective efficacy (Klassen, 2010) has been used to examine the relationship between stress and teachers' feelings about collaboration and support of their colleagues and school leaders. Lastly, the equity theory (Adams, 1963) may also give an explanation for the relationship between job stress of teachers and their perceptions of collective efficacy. These theories relate to the findings of the current study as discussed below.

In the data analysis of the second RQ, I discovered a difference in stress between the three levels of collective efficacy (high, average, and low). An inverse relationship between collective efficacy and stress exists, meaning that as collective efficacy increases, stress decreases. According to the social cognitive theory (Bandura, 1977, 1986, 1997), the decisions that teachers make about their classroom practices are directly influenced by their sense of efficacy, the more likely they are to be persistent, overcome obstacles and persevere when facing failure. With this being stated, it lends to the

findings of this study that higher collective efficacy is associated with lower stress levels (regardless of teacher classification). According to the theory of collective efficacy (Klassen, 2010), the level of job satisfaction declines when stress, as a result of student behavior and teaching demands, is elevated. Job stress may lessen when teachers have a feeling that school staff can work together to improve student outcomes. The foundation of the equity theory (Adams, 1963) is based on the idea that employees are discouraged and less motivated if they feel they put in more than they get back, and as a result put forth less effort and become unhappy. This theory notes that when employees feel supported and there is a balance between effort, support, and recognition, etc., a stronger and more productive relationship will exist. In turn, these employees will feel less stress. These also lend to the findings in this study that higher collective efficacy is associated with lower stress levels (regardless of teacher classification).

Limitations

The generalizability of the study findings was limited to elementary level teachers only in the state of South Carolina. Previous research has not addressed/ specified the differences in stress and collective efficacy among teachers across different grade level and states and findings from this study cannot convey the beliefs or states of mind in middle or high school teachers, or of teachers across the country. In spite of this, the results obtained from this study may be used as baseline data for future research.

Secondly, this research study was limited to online participation via a link posted to Facebook and Facebook teacher groups. This limited the population and omitted individuals that may not be proficient at using online tools or do not access social media

sites. Individuals that were not a "follower" of my Facebook page or part of the teacher groups where the survey was posted were also omitted.

A final limitation may be that individuals that feel stressed about work and/or feel overworked may not have wanted to complete the survey because it was about work. Several surveys were incomplete; however, it is not known whether or not this was the reason. Individuals may have felt that they did not have time to complete it, or they simply did not want to complete it. Because of this, it may have resulted in a skewed number of respondents that have a more favorable attitude toward their jobs. Despite these limitations, it is expected that these results may benefit teachers that are working toward eliminating the effects of stress.

Recommendations

It may be helpful for researchers to conduct further studies to explore the important factors related to stress levels and collective efficacy in schools. Future researchers could conduct the following studies in response to the findings and limitations: Examine the effect of related factors of collective efficacy on teachers' stress levels, such as teachers' training, class size, and student disability category. Some of these differences may account for differences in stress levels among teachers. For example, a special education teacher that has a full caseload of students classified as having an emotional disability may be more stressed than a special education teacher that has a half caseload of students classified as having a learning disability. Do these teachers experience similar effects of collective efficacy? Secondly, researchers may examine the differences in teachers' stress levels among different education levels (elementary,

middle, and high school) in states across the country. Do elementary teachers experience the same levels of stress as high school teachers? It would also be interesting to know if stress levels of teachers are similar, for example, between California and South Carolina, and other states. Researches may examine the differences in teachers' stress levels and collective efficacy using physical surveys mailed to teachers. This would eliminate limitations due to lack of technological skills. Researchers may incorporate direct feedback from teachers about details regarding what leads to higher levels of collective efficacy. This information may assist leaders in developing programs or strategies to improve collective efficacy based on teacher input. Lastly, researchers could examine how levels of collective efficacy affect student achievement. Results may show school leaders the importance of building collective efficacy with teachers in order to see positive changes with students.

Implications

The results of this study may influence practical applications for positive social change. Teachers are the fundamental component of educating students and stress among teachers has been an area of increasing concern in education. Stress can be manifested in many different ways and can affect the way teachers feel, their behavior, or their physical demands (Fimian, 1982). Stress also affects the classroom environment and over a period, influences student learning (Kipps-Vaughan, 2013).

Contrary to what was expected, I found that both general and special education teachers experience similar levels of job stress. I also found that in both general education and special education teachers, there is an inverse relationship between collective

efficacy and stress, meaning that as collective efficacy increases, stress decreases. In line with these findings, Klassen (2010) noted that teachers, who work in schools where the communication among staff is good and there is a strong sense of collaboration between colleagues, express lower stress levels and higher job satisfaction levels and commitment.

These findings may prompt school leaders to find ways to build collective efficacy in their schools. Angelle and Teague (2014) noted that when a faculty has a strong collective efficacy, it is indicative of confidence in their ability to meet their goals and achieve what they set out to do. Goddard et al. (2004) indicated that when teachers have the opportunity to have an effect on school decisions that are relevant to instruction, the school is more likely to be characterized by a strong sense of collective efficacy. Brinson and Steiner (2007) noted that school leaders should direct their attention towards improving collective teacher efficacy because of several notable positive outcomes. Brinson and Steiner also noted that strong collective efficacy has resulted in outcomes such as improved student performance, improvement of the negative effects of low socioeconomic status, strengthened parent/teacher relationships, and establishment of a work environment that fosters teacher commitment to the school. Tschannen-Moran and Barr (2004) noted that schools that have high collective efficacy take responsibility for the academic outcomes of their students. These teachers do not believe that low academic outcomes and student achievement is an unavoidable consequence of issues such as low socioeconomic status, inability, or the background of a student's family. They do their best to help these students to achieve. Droogenbroeck et al. (2014) found that collaborating and discussing concerns and problems at work may incite a feeling of

unity and empathy, and also prevent attitudes and feelings of indifference and negativity towards others.

School leaders may take actions such as organizing team-building activities that support establishing good interpersonal relationships among colleagues and supervisors, establishing other types of opportunities for teachers to collaborate and share their experiences with one another, including teachers in school wide decision-making (e.g., related to instruction, behavior, activities, policies, student placement, etc.), and providing feedback based on performance results that can be easily implemented. These actions should be made amid both general and special education teachers alike. Brinson and Steiner (2007) noted that emphasizing building collective efficacy could give leaders a way to accomplish the goal of helping to guarantee that teachers possess the instructional skills as well as the professional confidence that is necessary to be effective teachers for their students.

Conclusion

Teaching can be a very stressful profession; however, collective efficacy may have a positive effect on the manner of how teachers experience stress. Based on my review of the literature, there have been only a few studies examining the relationship between teacher perceptions of stress and collective efficacy and the differences between general education and special education teachers. This topic may be important to school leaders and teachers because many teachers are leaving the field, resulting in a shortage of teachers across the country.

Through the application of the social cognitive theory, theory of collective efficacy, and equity theory, South Carolina elementary teachers' stress levels were examined in relation to their classification (general education and special education) and levels of collective efficacy. Recruitment occurred through postings on my Facebook timeline and in South Carolina Facebook teacher groups with a link to a survey containing the CE Scale, Short Form, the TSI, and a demographic component.

In this study, findings showed that no difference was found between general and special education teachers in their stress levels. However, there was an effect of teachers' level of collective efficacy on their stress levels. Teachers with low collective efficacy showed higher stress levels than did teachers with average collective efficacy and teachers with high collective efficacy. Results also indicated that teachers with average collective efficacy showed higher stress levels than did teachers with high collective efficacy. Lastly, there was no significant interaction found between teachers' classification (general education vs. special education) and teachers' level of collective efficacy (low, average, high) on their stress levels. In this study, I explored how collective efficacy influences stress in teachers in order to provide information to help legislators, administrators, educators, and other school leaders understand the needs of teachers and if any modifications or changes needed to be made to improve school resources.

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Appendix A: Recruitment Flyer for Potential Participants

You Are Invited to Participate in a Valuable Research Study

- This study is designed to determine if collective efficacy has a significant effect on stress among elementary special education teachers compared to elementary general education teachers
- If you are a general or special education public school teacher in South Carolina who has taught for at least 3 full school years, you are invited to participate in this study. Please note that your participation is completely voluntary
- This study will take approximately 20 minutes of your time

If you are willing to participate or are interested, but have questions, please contact the researcher directly for further information.

Tiffany A. Rich
School of Psychology
Walden University
[e-mail address redacted]

Appendix B: Collective Efficacy Scale – Short Form

Directions: Please indicate your level of agreement with each of the following statements about your school from strongly disagree to strongly agree. Your answers are confidential.

1 – Strongly Disagree
2 – Disagree
3 – Somewhat Disagree
4 – Somewhat Agree
5 – Agree
6 – Strongly Agree

1.	Teachers in the school are able to get through to the most difficult students.	1	2	3	4	5	6
2.	Teachers here are confident that they will be able to motivate their students.	1	2	3	4	5	6
3.	If a child doesn't want to learn teachers here give up.	1	2	3	4	5	6
4.	Teachers here don't have the skills needed to produce meaningful student learning.	1	2	3	4	5	6
5.	Teachers in this school believe that every child can learn.	1	2	3	4	5	6
6.	These students come to school ready to learn.	1	2	3	4	5	6
7.	Home life provides so many advantages that student's here are bound to learn.	1	2	3	4	5	6
8.	Students here just aren't motivated to learn.	1	2	3	4	5	6
9.	Teachers in this school do not have the skills to deal with student disciplinary problems.	1	2	3	4	5	6
10.	The opportunities in this community help ensure that these students will learn.	1	2	3	4	5	6
11.	Learning is more difficult at this school because students are worried about their safety.	1	2	3	4	5	6
12.	Drug and alcohol abuse in the community make learning difficult for students here.	1	2	3	4	5	6

Appendix C: Teacher Stress Inventory

The following are a number of teacher concerns. Please identify those factors which 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 feeling is when you experience it by clicking the appropriate rating on the 5-point scale. If you have not experienced this feeling, or if the item is inappropriate for your position, click number 1 (no strength; not noticeable). The rating scale is shown at the top of each page.

Examples:

I feel insufficiently prepared for my job. 1 2 3 4 5

If you feel very strongly that you are insufficiently prepared for your job, you would circle number 5.

I feel that if I step back in either effort or commitment, I may be seen as less competent. 1 2 3 4 5

If you never feel this way, and the feeling does not have noticeable strength, you would circle number 1.

HOW STRONG?	1 no strength; not noticeable	2 mild strength; barely noticeable	3 medium strength; moderately noticeable	4 great strength; very noticeable	5 major strength; extremely noticeable

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TIME MANAGEMENT

1. I easily over-commit myself.	1	2	3	4	5
2. I become impatient if others do things too slowly.	1	2	3	4	5
3. I have to try doing more than one thing at a time.	1	2	3	4	5
4. I have little time to relax/enjoy the time of day.	1	2	3	4	5
5. I think about unrelated matters during conversations.	1	2	3	4	5
6. I feel uncomfortable wasting time.	1	2	3	4	5
7. There isn't enough time to get things done.	1	2	3	4	5
8. I rush in my speech.	1	2	3	4	5

WORK-RELATED STRESSORS

9. There is little time to prepare for my lessons/responsibilities.	1	2	3	4	5
10. There is too much work to do.	1	2	3	4	5
11. The pace of the school day is too fast.	1	2	3	4	5
12. My caseload/class is too big.	1	2	3	4	5
13. My personal priorities are being shortchanged due to time demands.	1	2	3	4	5
14. There is too much administrative paperwork in my job.	1	2	3	4	5

PROFESSIONAL DISTRESS

15. I lack promotion and/or advancement opportunities.	1	2	3	4	5
16. I am not progressing my job as rapidly as I would like.	1	2	3	4	5
17. I need more status and respect on my job.	1	2	3	4	5
18. I receive an inadequate salary for the work I do.	1	2	3	4	5
19. I lack recognition for the extra work and/or good teaching I do.	1	2	3	4	5

DISCIPLINE AND MOTIVATION

I feel frustrated...

20. ...because of discipline problems in my classroom.	1	2	3	4	5
21. ...having to monitor pupil behavior.	1	2	3	4	5
22. ...because some students would better if they tried.	1	2	3	4	5
23. ...attempting to teach students who are poorly motivated.	1	2	3	4	5
24. ...because of inadequate/poorly defined discipline problems.	1	2	3	4	5
25. ...when my authority is rejected by pupils/administration.	1	2	3	4	5

PROFESSIONAL INVESTMENT

26. My personal opinions are not sufficiently aired.	1	2	3	4	5
27. I lack control over decisions made about classroom/school matters.	1	2	3	4	5
28. I am not emotionally/intellectually stimulated on the job.	1	2	3	4	5
29. I lack opportunities for professional improvement.	1	2	3	4	5

EMOTIONAL MANIFESTATIONS

I respond to stress...

30. ...by feeling insecure.	1	2	3	4	5
31. ...by feeling vulnerable.	1	2	3	4	5

32. ...by feeling unable to cope.	1	2	3	4	5
33. ...by feeling depressed.	1	2	3	4	5
34. ...by feeling anxious.	1	2	3	4	5

FATIGUE MANIFESTATIONS

I respond to stress...

35. ...by sleeping more than usual.	1	2	3	4	5
36. ...by procrastinating.	1	2	3	4	5
37. ...by becoming fatigued in a very short time.	1	2	3	4	5
38. ...with physical exhaustion.	1	2	3	4	5
39. ...with physical weakness.	1	2	3	4	5

CARDIOVASCULAR MANIFESTATIONS

I respond to stress…

40. ...with feelings of increased blood pressure.	1	2	3	4	5
41. ...with feeling of heart pounding or racing.	1	2	3	4	5
42. ...with rapid and/or shallow breath.	1	2	3	4	5

GASTRONOMICAL MANIFESTATIONS

I respond to stress...

43. ...with stomach pain of extended duration.	1	2	3	4	5
44. ...with stomach cramps.	1	2	3	4	5
45. ...with stomach acid.	1	2	3	4	5

BEHAVIORAL MANIFESTATIONS

I respond to stress...

46. ...by using over-the-counter drugs.	1	2	3	4	5
47. ...by using prescription drugs.	1	2	3	4	5
48. ...by using alcohol.	1	2	3	4	5
49. ...by calling in sick.	1	2	3	4	5

Demographic Variables

Your sex: Male Female

Number of years you have taught?

3-5 6-10 11-15 16-20 21-25 26-30 30+

Your age:

18-24 25-34 35-44 45-54 55-64 65+

What do you teach?

Special Education General Education

Which is the most advanced degree you have?

Bachelors Masters Masters +30 Doctorate

Appendix D: Collective Efficacy Scale Permission for Use

From: Roger Goddard <e-mail address redacted>
Sent: Monday, October 15, 2018 6:10 PM
To: Tiffany Rich
Subject: Re: Collective Efficacy Scale use

Hi Tiffany,

It's fine for you to use the collective efficacy scale for your dissertation research. I do not grant permission for commercial or for profit uses but you're dissertation research is fine. I wish you all the best with your study. Please be sure to cite the journal in which the scale was originally published as this is an expectation of the publisher.

Roger Goddard

Appendix E: Teacher Stress Inventory Permission for Use

The following permission statement was retrieved from the Teacher Stress Inventory Information Site www.instructionaltech.net:

Permission for Use

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

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

From: Michael Fimian <e-mail address redacted>
Sent: Monday, July 30, 2018 5:48 PM
To: Tiffany Devane
Cc: <e-mail address redacted>
Subject: RE: Teacher Stress Inventory

Sure, Tiffany, no problem… It looks like a very interesting project, so feel free to use the TSI…

Were you able to find the TSI page on my website? I recently updated the site, so I figured I'd ask.

I'm not familiar with the CE; could you send me copy so I can research it for my own curiosity?

Good luck with your thesis, Tiffany! Let me know how it works out!

Regards,

Michael

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