The Moderating Effect of Teacher Experience on Secondary Traumatic Stress and Teacher Self-Efficacy Among Rural Public School Teachers

Donna Kay Short

Department of Community Care and Counseling

A Dissertation Presented in Partial Fulfillment

Of the Requirements for the Degree of

Doctor of Education

School of Behavioral Sciences

Liberty University

2024

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Approved by:

Name and degree, Committee Chair

Name and degree, Committee Member

Abstract

Millions of teachers have exited the teaching profession as of 2020 and over 50% are likely to leave the profession during the next five years. High emotional stress is most often cited as the primary reason for the loss of teachers. There is also an increasing number of students entering school who having experienced various forms of trauma, such as abuse, death, violence, and neglect. In rural areas, poverty is a concern. These students often display trauma behaviors because of limited mental health resources. As rural public school teachers learn about student trauma, these teachers are at risk of secondary traumatic stress. Secondary traumatic stress is a maladaptive emotional response upon hearing about the trauma of another. In rural districts, high poverty rates, a lack of support, a lack of resources, and the multiple roles the teacher fulfills increase the likelihood a teacher can exhibit secondary traumatic stress symptomology, thus impacting teacher self-efficacy. Further, many rural teachers lack the knowledge and skills to recognize the symptoms of secondary traumatic stress. Secondary traumatic stress influences daily interactions between teachers and students, which can hinder teacher self-efficacy. However, one facet to consider is the moderating effect of teacher experience between the two variables. This correlational study investigated the question: Does teacher experience moderate the relationship between secondary traumatic stress and teacher self-efficacy among rural public school teachers? This study considered teacher experience, secondary traumatic stress, teacher secondary traumatic stress, teacher self-efficacy, and rural public school teachers.

Keywords: rural teachers, secondary traumatic stress, teacher emotional stress, teacher experience, teacher self-efficacy, trauma behaviors

Copyright Page

Dedication

I would like to dedicate this to my Savior, Jesus Christ. All glory goes to Him. Without His strength, this would not have been possible. “I don’t know where I would be if I didn’t know you. Thank God I do.” Lauren Daigle

I would also like to dedicate this to my children: Hannah, Joseph, and Micah. Thank you for your continued encouragement, support, and cheering me on throughout this process. I love you!

Acknowledgements

Thank you to Dr. Jeffrey McCarthy, my dissertation chair, for providing continued encouragement, guidance, and insight throughout this process.

Also, thank you to Dr. Lacy Ricks, my dissertation reader, for your additional feedback, encouragement, and time.

Finally, I would like to thank Dr. Shauna Frisbie. Without your constant belief in me, your encouragement, and your wisdom, I would not have considered this step.

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List of Abbreviations

Adverse childhood experiences (ACEs)

Attention deficit hyperactivity disorder (ADHD)

Post-traumatic stress disorder (PTSD)

Social cognitive theory (SCT)

Secondary traumatic stress (STS)

Secondary Traumatic Stress Scale (STSS)

Teacher Self-Efficacy Scale (TSES)

Chapter One: Introduction

Overview

Teaching has been ranked as one of the most emotionally stressful professions. Research concerning teachers has reported high levels of behavioral, emotional, physiological, and psychological symptoms from the emotional stress endured (Ormiston et al., 2022). Teachers are exiting the profession at high rates because of heightened emotional stressors (Brown & Biddle, 2023; Christian-Brandt et al., 2019; Ormiston et al., 2022). Factors such as high-stakes testing, increase in student violence, lack of consequences, low pay, and administration and parents who are unsupportive force teachers to reconsider remaining in the profession (Brown & Biddle, 2023; Christian-Brandt et al., 2019; Kerig, 2019; Schepers & Young, 2023). Compounding the emotional stress is working with students who exhibit behavior related to trauma, as teachers are expected to understand how to appropriately respond to these students (Borntrager et al., 2012; Christian-Brandt et al., 2019; Hydon et al., 2015; Ormiston et al., 2022; Schepers, 2017; Schepers & Young, 2023). This exposure to trauma behaviors of students places the teacher at risk for developing STS, which affects the teacher holistically (Borntrager et al., 2012; Burke-Harris, 2018; Engel, 1977; Hydon et al., 2015; Lazarus & Folkman, 1984; Ormiston et al., 2022; Schepers, 2017; Schepers & Young, 2023; Valent, 1995). The trauma behaviors of students, lack of resources, and the multiple roles rural public school teachers fill compound the high emotional stress and place the teacher at risk for STS symptomology that can negatively impact teacher self-efficacy. Yet, despite the increased emotional stress and demands of teaching, there still are over 4 million teachers who choose to remain in the profession and have approximately 15 years of teaching experience (U.S. Census Bureau, 2017). As such, teacher experience aids in lessening the negative impact of the STS on teacher self-efficacy. There is a dearth of literature that

examines the moderating effect of teacher experience on the relationship between STS and teacher self-efficacy among rural public school teachers. Therefore, this study investigated the extent to which teacher experience moderates the relationship between STS and teacher self-efficacy among rural teachers.

Background

Teacher retention related to teacher emotional health and chronic stress has been a concern for the past half-century. Smith and Milstein (1984) first discovered stressors among teachers during the 1930s. These emotional stressors included covering the classes of other teachers because of teacher absences and a lack of substitutes, salary complaints, and student disruptive behaviors (Smith & Milstein, 1984). Emotional stress increased among teachers in the 1940s because of being overworked, underpaid, and increased student classroom disruptions (Smith & Milstein, 1984). Teachers in the 1950s and 1960s experienced emotional stress because of newly added administrative roles that were not clearly delineated, such as new school counseling positions and expanded administrative staff (Smith & Milstein, 1984). Further, teacher emotional stress during the 1960s increased because of negative self-efficacy and self-doubt (Smith & Milstein, 1984). Concerns about unsupportive administration, unsupportive parents, and teachers attempting to understand emotionally disturbed student behaviors caused additional emotional stress (Smith & Milstein, 1984). Inadequate discipline policies and the rise in school violence added more emotional difficulty to already emotionally stressed teachers during the 1970s and 1980s (Smith & Milstein, 1984). Student disruptions and inconsistent discipline policies also increased the emotional stress of teachers during the 1990s. A major concern in the rise of student violence and the safety of schools heightened the emotional stress of teachers (Macro Learning, 2023). Finally, the 2000s saw growing class sizes, an increase in

student mental health concerns, and state-mandated tests, each of which contributed to anxiety, frustration, and mental and emotional health struggles among teachers (Macro Learning, 2023).

In addition to growing class sizes, high-stakes testing, and low pay; student trauma behaviors compounded the emotional stress of teachers. The increased emotional stress among teachers further created challenges for teachers to respond appropriately to the traumatic behavioral responses of their students (Borntrager et al., 2012; Christian-Brandt et al., 2019; Hydon et al., 2015). Therefore, teachers are more tired and burned out (Borntrager et al., 2012; Christian-Brandt et al., 2019; Hydon et al., 2015; Schepers, 2017; Schepers & Young, 2023).

According to the American Psychological Association (APA, 2021), trauma is a strong emotional response to a distressing event that results in immediate shock and denial. Negative trauma responses can create anxiety, depression, difficulties with relationships, headaches, and hypertension, and may include long-term emotional, physical, psychological, and social challenges (APA, 2021). Exposure to student trauma places public school teachers at high risk for STS, which impacts the self-efficacy of the teacher (Borntrager et al., 2012; Christian-Brandt et al., 2019; Hydon et al., 2015; Schepers, 2017; Schepers & Young, 2023).

Over 10 million students in the United States have experienced at least one form of trauma. Thus, every day, teachers are exposed to student trauma behaviors (Substance Abuse and Mental Health Services Administration [SAMHSA], 2023). Additionally, many students enter the classroom prior to age 16 having experienced trauma. As a result, teachers experience an increase in emotional stress, which impacts self-efficacy and places the teacher at risk for STS (Borntrager et al., 2012; Christian-Brandt et al., 2019; SAMHSA, 2023).

Public school teachers are concerned for and dedicated to the well-being of their students. However, there is little consideration among school districts regarding how this level of caring

emotionally and mentally impacts teachers (Baicker, 2020). Further, emotional stressors are compounded for rural public school teachers, as many must fulfill multiple roles. Teachers in rural schools take on additional roles as activity sponsors, coaches, crisis counselors, custodians, lunchroom monitors, librarians, maintenance staff, nurses, and technology assistants (Canales et al., 2008; Eppley, 2015). Performing multiple duties and attempting to mitigate the negative impact poverty has on their students creates additional emotional stress among rural teachers (Canales et al., 2008; Eppley, 2015).

Moreover, emotional stress is compounded for rural public school teachers since they often find themselves standing against rural stereotypes. Rural public schools are typically viewed as lacking academically and sub-standard compared to their urban and suburban counterparts (Corbett, 2013). Further, rural public school teachers and students are often viewed as narrowminded, prejudiced, and reluctant to change, which places additional emotional stressors on the rural public school teacher (Corbett, 2013).

Additionally, many rural students come from poverty-stricken environments with limited mental health resources (Canales et al., 2008; Eppley, 2015). Poverty compounds the emotional stress for rural teachers as well as the need for these teachers to manage the emotional and mental health needs of their students (Borntrager et al., 2012; Christian-Brandt et al., 2019; Hydon et al., 2015; Schepers, 2017, Schepers, 2023). As rural teachers are being called upon to address the mental and emotional health of their students, their personal emotional stress increases (A. Saenz, personal communication, August 7, 2023). Research demonstrates the emotional and mental stress of teachers is a significant factor in raising student achievement (Gagnon & Mattingly, 2015).

Teacher experience is also a factor that impacts student achievement along with the emotional and mental stress experienced by teachers. Research supports teacher experience as positively associated with gains in the achievement of students (Kini & Podolsky, 2017). Additionally, teacher experience can moderate the relationship between continual emotional stress that can lead to STS symptomology and teacher self-efficacy (Burke-Harris, 2018).

There is currently a lack of research on the moderating impact of teacher experience on the relationship between emotional stress that leads to STS and teacher self-efficacy among rural public school teachers. Much of the current research and economic and policy reforms focus on urban schools with little consideration for rural schools, and those advocating for rural education insist that rural schools are the forgotten minority (Azano & Stewart, 2015; Truscott & Truscott, 2005).

Problem Statement

STS continues to be well-researched among the helping professions (e.g., first responders, professional counselors, social workers); however, notably absent from STS research among the helping professions are rural public school teachers (Schepers, 2017, 2023). Yet, teachers are at high risk for STS, which is the emotional stress that comes from hearing about the traumatic experiences of another (National Child Traumatic Stress Network [NCTSN], n.d.). Teachers who have experienced STS display symptoms that are similar to PTSD (Cieslak et al., 2014; Everall & Paulson, 2004; Malach-Pines, 2005). These trauma-related stress symptoms exhibited by teachers often stem from learning about the trauma their students have experienced through activities such as drawing, journaling, friends, and the students telling the teacher (Cieslak et al., 2014; Everall & Paulson, 2004; Malach-Pines, 2005).

Emotional stress negatively correlates with teacher self-efficacy (von Muenchhausen et al., 2021). Self-efficacy is one's belief in their ability to achieve positive outcomes. Teachers with a positive self-efficacy believe they can positively impact student outcomes (Skaalvik & Skaalvik, 2017). However, STS undermines the self-efficacy among teachers and leads to exhaustion and depersonalization, which has a deleterious effect on student achievement (Schwarzer & Hallum, 2008). Further, rural teachers experience an increased amount of emotional stress because of a lack of resources to aid in mitigating the maladaptive effects of poverty on the student; therefore, rural teachers are at risk for STS and negative self-efficacy (Johnson et al., 2021).

Though research supports how emotional stress and STS negatively impact teacher self-efficacy, there is minimal research investigating teacher experience and its moderating effect on the relationship between the variables of STS and teacher self-efficacy (Bandura, 2017; Schepers & Young, 2023). Teacher experience includes the culmination of skills and training acquired over time that enables and equips a teacher with the techniques on how to perform better teaching tasks (Staake, 2023). Teacher experience for this study refers to the number of years a teacher has been in the teaching profession (Berger et al., 2018).

The investigation of how STS impacts the self-efficacy of rural public school teachers in schools is still relatively new, as there have been a few studies that have identified STS as widespread among teachers in urban schools (Borntrager et al., 2012; Christian-Brandt et al., 2019; Hydon et al., 2015; Schepers, 2017; Schepers & Young, 2023). However, there is less research investigating if teacher experience moderates the relationship between STS and teacher self-efficacy among rural public school teachers (Brown & Biddle, 2023; Christian-Brandt et al., 2019; Eppley, 2015; Kerig, 2019; Schepers & Young, 2023).

Purpose Statement

The purpose of this correlational study was to answer the question: Does teacher experience moderate the relationship between STS and teacher self-efficacy among rural public school teachers? This study investigated traumatic behaviors among students that place rural teachers at risk for STS. The SCT from Bandura (1977) provided the conceptual foundation for studying the construct of STS among rural public school teachers. A subset of Bandura's SCT is that of self-efficacy, which is necessary for the success of teachers. Teachers who have high-self-efficacy believe they have the ability to produce positive outcomes despite increased student challenges and emotional stress (Bandura, 1977, 1986). This study could aid future research focusing on the impact of STS among rural public school teachers. It provides connections and potential mitigating and protective factors for rural public school teachers to consider when faced with STS.

This correlational design study used the Secondary Traumatic Stress Scale (STSS) developed by Bride et al. (2004). It is a 17-item scale that measures maladaptive symptoms related to indirect exposure to traumatic events. These symptoms can include arousal, avoidance, and intrusive thoughts (National Center for PSTD, 2023). The study used the Teacher Sense of Efficacy Scale (TSES) to measure self-efficacy among rural public school teachers. The TSES was developed by Tschannen-Moran and Woolfolk Hoy (2001). The scale measures efficacy in three areas: instructional strategies, classroom management, and student engagement (Cocca & Cocca, 2022). The study also included a sociodemographic survey that collected data regarding years of teacher experience.

Significance of the Study

There is a scarcity of research investigating whether teacher experience moderates the relationship between STS and teacher self-efficacy among rural public school teachers (Schepers & Young, 2023). This study adds to the existing literature related to STS among public school teachers and builds upon existing studies that have identified STS among teachers (Fleckman et al., 2022; Ormiston et al., 2022; Rankin, 2022; Schepers & Young, 2023; Sprang & García, 2022). Having gained a better understanding of the impact of STS among rural public school teachers aids these teachers to better identify potential problematic symptoms of STS prior to an STS diagnosis (Cieslak et al., 2014). Early identification of STS symptomology aids in mitigating the negative impact on teacher self-efficacy, thus improving student outcomes.

Research Question

Rural public school teachers will benefit from an awareness of the symptomology of STS, and how STS influences teacher self-efficacy. This increased awareness of STS aids rural public school teachers in better understanding protective and mitigating factors against STS. Moreover, the study provided information that considered the moderating effect of teacher experience. The research question was developed from the current literature and comprised statistically testable variables for this correlational design study (Borntrager et al., 2012; Fleckman et al., 2022; Ormiston et al., 2022; Rankin, 2022; Schepers & Young, 2023; Sprang & García, 2022).

RQ1: Does teacher experience moderate the relationship between STS and teacher self-efficacy among rural public school teachers?

RQ1(a): Does STS predict teacher self-efficacy among rural public school teachers?

RQ1(b): If STS predicts teacher self-efficacy, does teaching experience moderate this effect among rural public school teachers?

Definitions

Rural populations—any county with a population of 150,000 or less (Monk, 2023).

Rural school districts—any district with a student population of less than 300 (Texas Education Agency, 2017).

Secondary traumatic stress—learning about the traumatic experiences of another, which results in holistic emotional duress (National Child Traumatic Stress Network [NCTSN], 2011).

Secondary Traumatic Stress Scale—It is a 17-item scale that measures maladaptive symptoms related to indirect exposure to traumatic events. Symptoms can include arousal, avoidance, and intrusive thoughts (Bride et al., 2004; National Center for PSTD, 2023).

Teacher experience—the number of years teachers have been in the profession.

Teacher self-efficacy—self-efficacy is the belief that an individual has in themselves to create the life desired. Self-efficacy is the foundational piece of human motivation, purpose, and success. Teacher self-efficacy beliefs impact choices, quality of effort, and how individuals persevere through difficulties (Bandura, 2016; Fernandez et al., 2016; Makadia et al., 2017, 1997).

Teacher Sense of Efficacy of Self Scale—a questionnaire created to measure teacher self-efficacy within three categories: classroom management skills, instructional strategies, and student engagement (Tschannen-Moran & Woodfolk Hoy, 2001).

Trauma—a strong emotional response to a horrible event that results in immediate shock and denial. Responses include long-term emotional, physical, and psychological reactions, including difficulties with relationships, emotional unpredictability, and headaches (APA, 2021).

Summary

Teachers are leaving the profession at an alarming rate because of heightened emotional stressors (Brown & Biddle, 2023; Christian-Brandt et al., 2019; Ormiston et al., 2022). Factors such as high-stakes testing, increase in student violence, lack of discipline, low pay, unsupportive administration, and unsupportive parents force teachers to reconsider remaining in the profession (Brown & Biddle, 2023; Christian-Brandt et al., 2019; Kerig, 2019; Schepers & Young, 2023). Compounding the emotional stress is working with students who exhibit behavior related to trauma, as teachers are expected to understand how to appropriately respond to these students (Borntrager et al., 2012; Christian-Brandt et al., 2019; Hydon et al., 2015; Ormiston et al., 2022; Schepers, 2017; Schepers & Young, 2023). Working with students who exhibit behavior related to trauma places teachers at high risk for STS, which is the emotional stress that comes from hearing about the traumatic experiences of another (National Child Traumatic Stress Network [NCTSN], n.d.). Teachers who have experienced STS display symptoms that are similar to PTSD (Cieslak et al., 2014; Everall & Paulson, 2004; Malach-Pines, 2005).

Additionally, the emotional stress teachers experience negatively correlates with teacher self-efficacy (von Muenchhausen et al., 2021). Self-efficacy is the belief by someone in their ability to achieve positive outcomes. STS undermines the self-efficacy among teachers and leads to exhaustion and depersonalization, which has a deleterious effect on student achievement (Schwarzer & Hallum, 2008). Moreover, rural public school teachers experience an increased amount of emotional stress because of a lack of resources to aid in mitigating the maladaptive effects of poverty on the student; therefore, rural teachers are at risk for STS and negative self-efficacy (Johnson et al., 2021).

Despite the increased risk of STS and negative self-efficacy faced by rural public school teachers, many teachers choose to continue teaching. For example, there are over 4 million teachers in the United States with an average of 15 years of teaching experience (Staake, 2023). Increased teaching experience provides enhanced skills to help mitigate STS and negative self-efficacy. As such, teacher experience has the capability to moderate the relationship between STS and teacher self-efficacy (Corbett, 2013).

Although there is research investigating STS among helping professions, there is minimal research seeking to answer the question: Does teacher experience moderate the relationship between STS and teacher self-efficacy (Whitt-Woosley & Sprang, 2023)? This study examined how teacher experience moderated the relationship between STS and teacher self-efficacy among rural public school teachers. This study used the STSS and the TSES to investigate this relationship. Further, a sociodemographic survey was included to determine years of experience among participants. This study adds to the existing literature related to STS among rural public school teachers and builds upon existing studies that have identified STS among teachers (Fleckman et al., 2022; Ormiston et al., 2022; Rankin, 2022; Schepers & Young, 2023; Sprang & García, 2022). The data aid in gaining a better understanding of how teacher experience moderates the relationship between STS and teacher self-efficacy among rural public school teachers. Additionally, the information collected helps these teachers to better identify potential problematic symptoms of STS prior to an STS diagnosis (Cieslak et al., 2014). Early identification of STS symptomology aids in mitigating the negative impact on teacher self-efficacy, thus improving student outcomes.

Chapter Two: Literature Review

Overview

Teaching has been ranked as one of the most emotionally stressful professions, as research indicates a high degree of exposure to behavioral, emotional, physiological, and psychological symptoms experienced by rural public school teachers (Ormiston et al., 2022). Additionally, mental health and behavior challenges exhibited among students impact the mental and emotional health of the classroom teacher (Ormiston et al., 2022).

Further compounding emotional stress within the classroom is working with students who display trauma behaviors and reactions. Approximately 50-60% of children have endured trauma or adverse childhood experiences (ACEs) by the age of 18 (Centers for Disease Control & Prevention, 2019; Merrick et al., 2018; National Child Traumatic Stress Network [NCTSN], 2018; Porche et al., 2016). Drs. Felitti and Anda (1998) described ACEs as experiencing abuse, domestic violence, having an incarcerated parent, living with a substance abuser, living with one who struggles with mental illness, and neglect. The Philadelphia ACE Project (2012) expanded ACEs to include bullying of any type, living in an unsafe neighborhood, living in foster care, racism, and witnessing community violence. Research indicates a link between poverty and trauma behaviors; therefore, poverty can be considered another ACE (Hughes & Tucker, 2011). Poverty is prevalent among rural areas, which causes students to exhibit trauma behaviors (Kaiser et al., 2017). As a result, some students who have experienced ACEs display trauma responses that place the teacher at more risk for STS and impact rural public school teacher self-efficacy and increase emotional stress (Ormiston et al., 2022; Rankin, 2022).

Self-efficacy is the belief by an individual in their ability to achieve positive outcomes. Emotional stress negatively correlates with teacher self-efficacy. Emotional stress causes higher

levels of anger, exhaustion, and hopelessness that undermine the self-efficacy of the teacher (Burić et al., 2020; von Muenchhausen et al., 2021). Teachers with positive self-efficacy believe they possess the ability to positively impact student outcomes (Skaalvik & Skaalvik, 2017). STS undermines the self-efficacy of teachers, which leads to exhaustion and depersonalization, and negatively impacts student achievement (Schwarzer & Hallum, 2008). Rural public school teachers are at higher risk for STS and negative self-efficacy because of a lack of mental health resources to aid students who experience trauma (Johnson et al., 2021).

Although rural public school teachers are at higher risk for emotional stress that can lead to STS and negative self-efficacy, many teachers remain in the teaching profession. For example, rural public school teachers in Texas have an average of 13.7 years of experience (Texas Education Agency [TEA], 2017). Research also supports the idea that teacher experience is positively associated with student academic gains (Kini & Podolsky, 2017). Further, teacher experience has been positively correlated with increased student learning and student attendance (Kini & Podolsky, 2017). Research has found that teacher effectiveness increases as the teacher accumulates experience. This increased teacher experience also enhances coping skills necessary to mitigate the high emotional stress and negative teacher self-efficacy (Corbett, 2013; Kini & Podolsky, 2017).

Theoretical Framework

Sprang et al. (2021) explained compassion fatigue, STS, and vicarious trauma can have overlapping definitions to the extent that research often uses these terms interchangeably. It is important to distinguish the differences between compassion fatigue, STS, and vicarious trauma. Gottfried and Bride (2018) described compassion fatigue as resulting from burnout and caring deeply that is often caused by profound empathy. In contrast, vicarious trauma results in negative

beliefs about self, which can create low self-efficacy (Gottfried & Bride, 2018). STS results from hearing or learning about the trauma of others. STS symptoms mimic those of PTSD (Makadia et al., 2017). STS and PTSD symptoms can include avoidance, anxiety, hyperarousal, intrusive thoughts, irritability, and sleep difficulties (Makadia et al., 2017). This study focused on STS and its impact on the self-efficacy of rural public school teachers.

The conceptual and theoretical frameworks used for this study included Bandura's (1977) social cognitive theory (SCT), Engel's biopsychosocial model for trauma (1977), Lazarus and Folkman's transaction model of stress (1984), and Valent's (1995) work on STS. The theoretical foundation created an understanding of how student trauma behaviors increase the risk of STS among teachers and the effect of STS symptomology on teacher self-efficacy among rural public school teachers.

There are several theories and models explaining coping mechanisms for stress, responses to trauma, and STS (Lang, 1979; Nijdam & Wittmann, 2022). The similarities in which individuals respond to the emotional stressors in the environment are important to understand, particularly when investigating the teacher's response to emotional stress. How a teacher responds to the emotional stressors in their classroom determines the possibility of developing STS (Valent, 1995). The study examined the transactional model of stress (Lazarus & Folkman, 1984), the biopsychosocial model (Engel, 1977), the work on STS by Valent (1995), and the SCT (Bandura, 1997) to build on these constructs and lay the conceptual and theoretical foundation. Although distinctive, each model shared the common perspective of the holistic approach to traumatic stress and the mark it leaves on the individual.

Transactional Model of Stress

Lazarus and Folkman's (1984) transactional model of stress set the foundation for researching stress. The transactional model of stress describes important facets of stress response (Biggs et al., 2017). These concepts can be applied directly to classroom teachers and their response to the emotional stressors in their environment. Lazarus and Folkman (1984) explained that individuals quickly and continually evaluate the stimuli within their environment. In Lazarus and Folkman's terms, this evaluation is known as appraisal, which is the cognitive process used by individuals to apply meaning to stimuli and events in their environment. Appraisal is important because it is the perception of the individual that determines if the situation is stressful, not the situation itself (Biggs et al., 2017). Within seconds, classroom teachers appraise student behaviors, learning successes, and struggles, the mental and emotional health of their students as students enter the classroom, and the responses of students to the environment. This appraisal occurs rapidly and sometimes abruptly. This sudden appraisal occurs when an unexpected disruption in the classroom happens, as some students are unable to control behaviors resulting from trauma (Biggs et al., 2017; García-Carmona et al., 2018; Lazarus & Folkman, 1984; Rankin, 2022).

According to Lazarus and Folkman (1984), the appraisal of the environment can either be a primary appraisal or a secondary appraisal (Biggs et al., 2017, p. 352; Lazarus & Folkman, 1984). Primary evaluation applies meaning to the transaction in the environment and determines if it is harmful, neutral, or stressful. In seconds, teachers evaluate student behaviors in the classroom and give them meaning (Biggs et al., 2017; Lazarus & Folkman, 1984). As the evaluation is taking place, emotions are created within (Biggs et al., 2017; Lazarus & Folkman, 1984). If a teacher deems the situation as stressful, negative emotions are formed. The teacher is

now enduring emotional stress, which Lazarus and Folkman (1984, p. 141) defined as an exposure to a situation that is considered threatening or challenging and surpasses the person's ability to cope. Teachers face the challenge of split-second decisions when evaluating student behaviors and giving them meaning. Without understanding the root cause of the student's disruptive behavior, some teachers evaluate situations as harmful and thus mistakenly apply punitive discipline (García-Carmona et al., 2018; Rankin, 2022). When the situation is viewed as harmful, the teacher is no longer evaluating the situation but coping. When coping, the teacher attempts to handle their own emotional responses, or they try to handle the stressor, which is secondary appraisal (Biggs et al., 2017; Lazarus & Folkman, 1984).

The secondary appraisal aspect of the model challenges classroom teachers. Because of their lack of knowledge and skills regarding traumatic reactions and behaviors, teachers find themselves attempting to manage the stressor, which, in this case, is the students. Attempting to manage a student rather than the root causes of the behaviors creates difficulties and can increase emotional stress (Biggs et al., 2017; García-Carmona et al., 2018; Lazarus & Folkman, 1984; Rankin, 2022). A teacher cannot effectively respond to the student without understanding the root cause of the behavior. As the teacher learns about the causes of the behavior and understands it is a trauma response, the teacher can become problem-focused rather than emotionally coping. A problem-focused teacher attempts to deal with the situation, which results in a change in the circumstance (Biggs et al., 2017; Lazarus & Folkman, 1984). A teacher who emotionally copes with the challenge attempts to deny the difficult situation or attempts to escape the situation, which does not solve the problem (Biggs et al., 2017; Lazarus & Folkman, 1984). Yet, as the teacher learns the root of the problematic behaviors is caused by a traumatic event, the teacher becomes at risk for STS.

Biopsychosocial Model

The biopsychosocial model examines the biological, psychological, and social impacts on the individual when faced with trauma (Engel, 1977). As teachers handle their own personal traumas and encounter the trauma of their students, they are holistically impacted.

This model proposes that the health of a teacher impacts biological, emotional, mental, and social processes (Engel, 1977). The biological facet of the model describes the impact of trauma and emotional stress on the teacher's physical health. Chronic emotional stress teachers endure can have maladaptive effects on physical health and lead to STS (Burke-Harris, 2018; Engel, 1977; van der Kolk, 2015). Emotional stress and STS have been related to fatigue, gastrointestinal difficulties, headaches, hypertension, and somatoform disorders (Burke-Harris, 2018; Engel, 1977). The physical ailments teachers experience lead to disconnect with students, depersonalization, high absenteeism, and low performance, each of which leaves its mark on the classroom environment and rural public school teacher self-efficacy.

Not only does the model by Engel (1997) describe biological aspects, but Engel also explained the psychological struggles individuals face amid emotional stress. These psychological struggles can arise from any current or past trauma and learning about the trauma of students. Psychological struggles can result in rural public school teachers experiencing anxiety, a decrease in the belief in self-efficacy, a decrease in their self-esteem, depression, and using ineffective coping skills (Engel, 1977). Teachers are struggling emotionally and psychologically as they face emotional stressors in the classroom, which triggers personal trauma events. Teachers also lack resources to help mitigate the impact of the emotional stressors (Makadia et al., 2017).

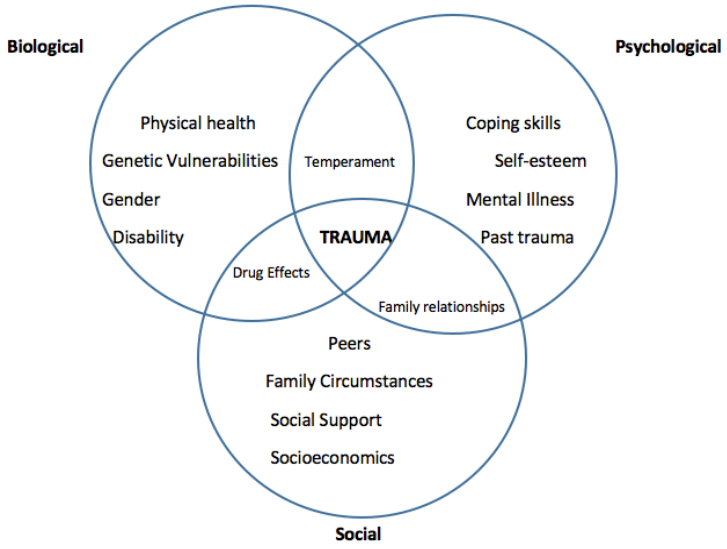
Learning about the traumatic experience of the student can trigger personal memories of trauma a teacher endured, causing anxiety, depression, increased emotional stress, and worry. As these challenges increase, the teacher questions their abilities to be an effective classroom teacher, creating a negative cycle (Makadia et al., 2017). The rural public school teacher becomes increasingly depressed and begins to question their self-efficacy, which leads to further depression, and so the cycle continues. This supports current research explaining why teachers are leaving the profession and have high absenteeism (Biggs et al., 2017; García-Carmona et al., 2018; Lazarus & Folkman, 1984; Rankin, 2022).

The third link of the biopsychosocial model is the social aspect. The social facet explains the social support network a person turns to for emotional and practical support (Engel, 1977). Social support systems among teachers may include colleagues, family members, friends, and other social networks. As teachers learn about and encounter the traumatic experiences of their students, some teachers become suddenly closed off to family and friends and begin to isolate themselves from colleagues, which creates further emotional stress. Without proper support systems in place, emotional stress levels increase, and rural public school teacher self-efficacy decreases (Biggs et al., 2017; García-Carmona et al., 2018; Lazarus & Folkman, 1984; Rankin, 2022).

Figure 1 illustrates the link between the biological, psychological, and social aspects of the biopsychosocial model. The model clearly reveals the holistic impact emotional and traumatic stress have on the teacher. This model is a foundational framework used to succinctly demonstrate the impact trauma and STS have on rural public teachers (Engel, 1977).

Figure 1

Biopsychosocial Model



Source. (Engel, 1977).

Secondary Traumatic Stress Theory of Paul Valent

The theory of secondary traumatic stress provides an additional foundation for this study and describes the holistic impact STS has on the individual. Secondary trauma is learning about the traumatic experiences of others, whereas primary trauma is trauma that is experienced personally (Valent, 1995). Valent (1995) described emotional stressors from biological, psychological, and social aspects, which align with Engel's biopsychosocial model (Engel, 1977). This also supports research that describes the impact of STS on all parts of the individual (Biggs et al., 2017; Burke-Harris, 2018; Engel, 1977; García-Carmona et al., 2018; Lazarus & Folkman, 1984; Molnar et al., 2017; Rankin, 2022; van der Kolk, 2015). Valent (1995, p. 21) explained the responses of STS as being elicited in helpers who identify with and complement victim survival strategies. These constructs reinforce how trauma wholly affects the individual.

When considering the biological impact of emotional and traumatic stress on an individual, Valent (1995) described the maladaptive physical impact STS has on the body.

Negative physical impacts of emotional and traumatic stress include abnormal heart rhythms, cardiovascular diseases, gastrointestinal difficulties, heart attacks, high blood pressure, and strokes (Burke-Harris, 2018; Engel, 1977; Valent, 1995; van der Kolk, 2015). However, research does not suggest chronically high emotional and traumatic stress causes a specific illness or disorder, but there is evidence that chronically high emotional and traumatic stress is maladaptive (Burke-Harris, 2018; Engel, 1977; Felitti et al., 1998; Valent, 1984; van der Kolk, 2015). High amounts of emotional stress can lead to alterations in brain activity, disruptions in the ability to learn and process information, hinder the ability to remember, and lead to a shorter life span (Burke-Harris, 2018; Engel, 1977; Felitti et al., 1998; van der Kolk, 2015).

Psychological effects that cause continued high emotional and traumatic stress include anxiety, burnout, depression, eating disorders, negative cognition, negative moods, personality disorders, and somatoform disorders (Burke-Harris, 2018; Engel, 1977; Valent, 1984; van der Kolk, 2015). As rural public school teachers are continually exposed to student traumatic experiences, teachers are at risk for psychological difficulties that lead to high absenteeism, cynicism, depression, exhaustion, negative moods, and disruptions between student-teacher relationships. Emotional and traumatic stress negatively impacts social relationships and contributes to avoidance, disruption in communication, and isolation (Burke-Harris, 2018; Engel, 1977; Valent, 1984). Rural public school teachers begin to avoid and isolate from colleagues, family, and friends. This contradicts the social needs of teachers who deal with STS. Rural teachers who display STS symptomology need care, comfort, companionship, constant and stable support, love, and tangible aid, which helps to mitigate the deleterious effects of STS (Valent, 1995).

Because of the high emotional and traumatic stress, teachers also begin to isolate and avoid activities that previously brought joy. Avoiding and isolating from difficult situations causes rural public school teachers to experience anxiety, hyperarousal, and loss of sleep because of intrusive thoughts. Intrusive thoughts also cause rural public school teachers to become irritable with family and friends, and they disconnect from students, which contributes to the feelings of isolation (Makadia et al., 2017). As rural teachers continue to avoid and isolate, the symptoms increase, causing a downward spiral that becomes cyclical. These behaviors parallel those of PTSD, which includes symptoms such as anxiety, avoidance, hyperarousal, irritability, intrusive thoughts, and sleep difficulties (Makadia et al., 2017). Understanding the all-encompassing impact of STS aids in investigating how this type of emotional stress influences self-efficacy among rural public school teachers.

Social Cognitive Theory

SCT explains the influence of personal experiences, environmental factors, and social interactions on an individual's behavior (Bandura, 1977; Fernandez et al., 2016). A key point of SCT is that of self-efficacy, which is described by Bandura (1977) as the belief an individual has in themselves to create the life desired and is the foundational piece of human purpose, motivation, and success (Bandura, 1977, 1986, 1997; Fernandez et al., 2016). Personal self-efficacy beliefs impact choices, quality of effort, and how individuals persevere through difficulties (Bandura, 2016; Fernandez et al., 2016; Makadia et al., 2017, 1997). Individuals who exhibit positive self-efficacy see difficulties as challenges to overcome. In contrast, individuals with low self-efficacy are quick to give up and become angry when difficulties arise (Bandura, 2016; Fernandez et al., 2016; Makadia et al., 2017, 1997).

Self-efficacy positively influences the performance of an individual, which causes the individual to evaluate their capabilities when challenges present themselves (Bandura, 2016; Fernandez et al., 2016; Stajkovic & Luthans, 2002). Self-efficacy then directs if the individual will begin the task, how much energy will be put forth, and how long the energy will continue (Bandura, 2016; Fernandez et al., 2016; Stajkovic & Luthans, 2002). Therefore, a person's performance cannot be predicted without taking self-efficacy into consideration. An individual with low self-efficacy does not believe they have the ability to do what is needed to succeed (Bandura, 2016; Fernandez et al., 2016; Stajkovic & Luthans, 2002).

As a result, self-efficacy among rural public school teachers is important to bring about success in the classroom, as teachers who possess a high sense of self-efficacy tend to see positive student outcomes (Shoulders & Krei, 2015). Rural teacher self-efficacy also determines the ability of the teacher to persevere and continue to perform in challenging situations (Evans-Palmer, 2015). In contrast, rural teachers with low self-efficacy are rigid and view difficulties as challenges to be managed, not as problems to be solved (Evans-Palmer, 2015; Shoulders & Krei, 2015). These teachers become stuck in cynicism and discouragement (Evans-Palmer, 2015; Shoulders & Krei, 2015).

Related Literature

Adverse Childhood Experiences

Exploring the various traumatic experiences that students endure helps to better understand the emotional stressors experienced by teachers that lead to STS. Each day, teachers come to encounter traumatic experiences their students are attempting to process. According to the National Traumatic Stress Network (NTSN, 2023), approximately two-thirds of students will experience a traumatic event by the time they reach the age of 16. Many of these traumatic

experiences are known as ACEs (Brown et al., 2022; Leitch, 2017; Roberts & Murray, 2023; SAMSHA, 2023). The original study of ACEs and their impact on long-term adult health was conducted by Dr. Vincent Felitti of the Department of Preventive Medicine at Kaiser Permanente and Dr. Robert Anda of the Centers for Disease Control (Felitti, 2002). The study found adverse experiences can cause chronic emotional stress that has a holistic and deleterious effect on the child. A child may experience various categories of adverse experiences that include child abuse (e.g., emotional, mental, physical, psychological, sexual), having a parent who is incarcerated, having a family member who is a substance abuser, living with someone who is mentally ill, neglect (e.g., emotional, medical, physical), and witnessing domestic violence (Felitti et al., 1998). The ACEs categories expanded to include being a refugee, community violence, disasters (i.e., natural or human-made), exposure to bullying (e.g., physical, cyberbullying), homelessness, living in foster care, living in an impoverished home, neighborhood safety, and racism (Cronholm et al., 2015; Kaiser et al., 2017; Szymanski et al., 2011).

Trauma and trauma behavior reactions are encountered in the classroom because of the high prevalence of ACEs among students. Although students who endure trauma are impacted behaviorally, biologically, emotionally, mentally, and psychologically; this study focused on the behavioral and emotional impact the student trauma behaviors have on the rural public school teacher (Essary et al., 2020; Fleckman et al., 2022; Kerig, 2019; Rankin, 2022; Roberts & Murray, 2023; Schepers, 2023).

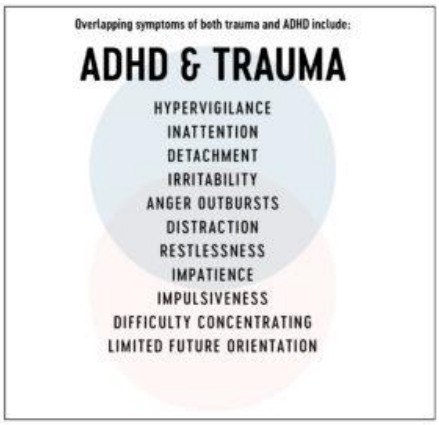
Traumatic experiences hinder the ability of students to learn to regulate their emotions, and traumatic experiences disrupt the student's feelings of safety and security (Blanton et al., 2022; Brunzell et al., 2015; MacLochlainn et al., 2021; Roberts & Murray, 2023). The trauma behaviors of students often lead to classroom disruption that, many times, results in the teacher

applying punitive disciplinary action. Teachers use punitive disciplinary action because they do not have the knowledge or understanding to distinguish between defiant behaviors and trauma behaviors (Blanton et al., 2022; Brunzell et al., 2015). As the student continues to endure trauma, the behavioral and emotional reactions can also include the student exhibiting aggression, dissociation, and experiencing physical and motor problems (Brunzell et al., 2015). Traumatic experiences have also been connected to concentration difficulties, IQ deficits, and learning impairments (Blanton et al., 2022). As a result, students who display trauma behavioral reactions are more likely to experience lower academic achievements, language delays, and retention, suspension, or expulsion. These behavioral difficulties may also lead to a referral for special education or cause the student to drop out (Brunzell et al., 2015).

Disruptive behaviors in the classroom are often viewed through the lens of attention deficit hyperactivity disorder (ADHD) instead of a trauma lens, as noted in Figure 2. The difficulties of a student regulating their emotions, difficulties concentrating, irritability, and remaining in a state of hyperarousal suggest ADHD (Szymanski et al., 2011). Feelings of anxiety that characterize PTSD behaviors can imitate the impulsivity category of ADHD (Szymanski et al., 2011). However, these impulse-driven behaviors are also normal responses to traumatic experiences. As students exhibit these behaviors, they are often considered defiant, oppositional, and non-compliant (Szymanski et al., 2011). Further, improper diagnosis or treatment of the causes of the behaviors can lead to further behavioral struggles within the classroom. Thus, without the ability to mitigate these behaviors, emotional stress levels among teachers increase, placing them at risk for STS (Essary et al., 2020; Fleckman et al., 2022; Kerig, 2019; Rankin, 2022; Roberts & Murray, 2023; Schepers, 2023).

Figure 2

Attention Deficit Hyperactivity Disorder and Trauma Overlap



Source. Soma (2020).

Equally important is the fact that students who live in poverty potentially display traumatic reactions, which emotionally impact rural public school teachers (Blitz et al., 2020; Kaiser et al., 2017). Government economic policies have increased poverty in isolated communities, which then creates destructive consequences for rural districts and teachers (Blitz et al., 2020, p. 95). Rural areas also lack resources to alleviate poverty, which increases emotional stress in teachers and increases traumatic experiences among the children living in these areas (Blitz et al., 2020; Kaiser et al., 2017). Students arriving at school from impoverished homes have an increase in mental health challenges and socio-emotional struggles (Blitz et al., 2020; Kaiser et al., 2017). However, because of the areas in which they live, mental health services are not readily available, which places additional feelings of obligation on the rural public school teacher to support and effectively engage with these students (Blitz et al., 2020; Kaiser et al., 2017). The rural public school teacher is called upon to mitigate the negative effects of poverty with limited available resources, which places them at risk for STS.

Secondary Traumatic Stress

Professionals within the human services sector suffer the consequences of indirect exposure to emotional stressors (Cieslak et al., 2014; Everall & Paulson, 2004; Malach-Pines, 2005). These emotional stressors include meeting people who have experienced traumatic events, hearing the graphic and traumatic experiences from survivors, and exposure to the cruelty of others (Cieslak et al., 2014). Several consequences of this level of traumatic exposure are vicarious traumatization, STS, job burnout, and compassion fatigue (Cieslak et al., 2014). Although there is overlap within these terms, each has a unique characteristic delineating it from the others.

Job burnout encompasses the totality of exhaustion that includes cognitive, emotional, and physical exhaustion caused by emotionally difficult situations, leading to cynicism and inefficacy (Cieslak et al., 2014; Everall & Paulson, 2004; Malach-Pines, 2005). Vicarious traumatization is the negative cognitive effects of indirect exposure to trauma, which disrupts the person's sense of control, intimacy, safety, and trust (Cieslak et al., 2014). In contrast, compassion fatigue is unique because it encompasses emotional emptiness because of a deep sense of hopelessness and loss of empathy (Cieslak et al., 2014). For those in the helping professions, research reveals that STS is an occupational risk because of the multiple and continual experiences of dealing with the trauma of others (Cieslak et al., 2014; Everall & Paulson, 2004; Figley, 1995).

STS resembles PTSD, and the symptomology develops in three clusters, as noted in Table 1: avoidance of trauma triggers and emotions, hyperarousal, and reexperiencing trauma (Cieslak et al., 2014). Some teachers re-experience the traumatic situation of the student through dreams or in recollections of thought and, therefore, cannot prevent these intrusive thoughts from

occurring, resulting in increased emotional stress. Avoidance is another key indicator of STS, which involves the person avoiding that which reminds them of the traumatic event. Teachers begin to avoid students and depersonalize relationships (Cieslak et al., 2014). Teachers also avoid feelings, situations, or thoughts that remind them of the event (Cieslak et al., 2014; Everall & Paulson, 2004). An individual may also exhibit a decreased affect and a loss of interest in activities that previously brought enjoyment (Cieslak et al., 2014; Everall & Paulson, 2004). For teachers, this means they no longer enjoy activities surrounding school, relationships with students, or teaching, which negatively affects their emotional state (Cieslak et al., 2014; Everall & Paulson, 2004). Teachers may also experience constant arousal, which leads to difficulties in sleeping and concentrating, displaying an exaggerated startle response, and hypervigilance (Everall & Paulson, 2004). These experiences create emotional stress that may result in depression, insomnia, and a loss of interest in social interaction. Finally, some teachers demonstrating STS symptomology display an inability to care, lose empathy, and show difficulties when making decisions (Everall & Paulson, 2004).

Table 1

Similarities of Symptoms—Secondary Traumatic Stress and Post-traumatic Stress Disorder

STS Symptoms	PTSD Symptoms
Difficulty sleeping; continued thinking on the traumatic event; intrusive thoughts	Intrusion—nightmares and flashbacks
Anxiety and concerns about safety; mood swings; irritable	Arousal—hypervigilance and mood shifts
Feelings of inadequacy, guilt, isolation from others, withdrawn	Negative cognition and mood—isolation, guilt, shame
Avoidance and detachment from peers and students; physically withdrawn from others	Avoidance—avoid reminders of trauma and triggers, avoiding others

Source. DSM 5 TR (2023).

STS results in negative consequences if not remedied and may appear within the helping professions as if the individual no longer cares or no longer connects with coworkers and colleagues. The individual with STS may seem fatigued and bored, while others may begin

canceling appointments, showing up late, and being unresponsive to the needs of those around them (Cieslak et al., 2014; Everall & Paulson, 2004). Further, if the person is confronted, there is denial including the use of substances such as alcohol or drugs (Cieslak et al., 2014; Everall & Paulson, 1994).

Secondary Traumatic Stress and Public School Teachers

Notably missing from research are public school teachers when investigating STS in the helping professions (Rankin, 2022). Research is slowly starting to explore the effect student trauma behaviors have on the emotional state of teachers (Schepers, 2023). STS is emotional distress, when considering teachers, that results from hearing about the first-hand trauma experiences of another person or persons, in this case, students (Essary et al., 2020; Fleckman et al., 2022; Kerig, 2019; Rankin, 2022; Roberts & Murray, 2023; Schepers, 2023). Rural public school teachers learn about the traumatic experiences of students through student drawings, journal writing, overhearing conversations, or students telling their stories (Essary et al., 2020; Fleckman et al., 2022; Halevi & Idisis, 2017; Kerig, 2019; Rankin, 2022; Roberts & Murray, 2023; Schepers, 2023). Rural public school teachers are at risk of STS because they do not know, recognize, or understand the influences of STS that result from exposure to student trauma experiences (Carello & Butler, 2015).

Emotional stress levels among public school teachers are at an all-time high, and emotional stress wholly affects teachers (García-Carmona et al., 2018). STS often imitates PSTD symptoms such as avoidance, hyperarousal, intrusive thoughts, and negative moods and cognitions (American Psychiatric Association, 2022; Schepers & Young, 2023; Simon et al., 2022). Teachers often become irritable toward students, cynical, continually worry about student safety, experience sleep difficulties, and have high absenteeism because of the emotional stress

from exposure to trauma behavior by students (Fleckman et al., 2022; Ormiston et al., 2022; Rankin, 2022; Schepers & Young, 2023; Sprang & García, 2022). Furthermore, teachers who experience STS struggle to make decisions, work performance decreases, and relationships with family and coworkers become strained (Rankin, 2022). The culmination of STS symptomology often results in emotional exhaustion, depersonalization, and feelings of inadequacy or helplessness (Fleckman et al., 2022).

Teachers who experience STS are also at risk of physical difficulties that include high blood pressure, eating difficulties, fatigue, gastrointestinal difficulties, and sleep difficulties (Burke-Harris, 2018; García-Carmona et al., 2018; Valent, 1995; van der Kolk, 2015). Teachers who reach high levels of exhaustion have difficulty managing classroom behaviors, which increases emotional stress levels, thus creating a deleterious STS cycle (Arens & Morin, 2016). Additionally, teachers do not recognize the symptoms of STS; therefore, many teachers believe they should "try harder" to improve these areas of struggle, which compounds emotional duress when this strategy fails (García-Carmona et al., 2018).

Susceptibility to Secondary Traumatic Stress

All teachers are susceptible to STS; however, some teachers are at a higher risk than others based on their personal emotional state. Teachers who have an increased exposure to PTSD have a higher risk of developing STS. These teachers are around friends, relatives, or others who have been diagnosed with PTSD (Essary et al., 2020; Gottfried & Bride, 2012; Miller & Sprang, 2017). Moreover, teachers who have anxiety and depression and have endured personal trauma are also at a higher risk of STS development (Essary et al., 2020; Gottfried & Bride, 2012; Hydon et al., 2015; Miller & Sprang, 2017). The personal trauma history of teachers may also become a problem, as the traumatic experience of students can become a trigger for the

teacher (Hydon et al., 2015). The traumatic events of the student remind the teacher of past personal trauma the teacher has endured, which creates difficulties in handling emotions for the teacher, thus increasing emotional stress (Hydon et al., 2015; Rankin, 2022).

Baum et al. (2014) found that female teachers are more susceptible to STS since they are more empathetic and utilize emotion-focused coping skills. Additionally, new teachers tend to be at higher risk for STS because they have not had the time to grow and develop the necessary strategies to mitigate STS symptomology (Rankin, 2022). Further, new teachers are not trained in trauma-informed principles, knowledge, and skills to aid in mitigating STS.

Although personal factors can be attributed to a higher risk of STS, the school environment also impacts the emotional well-being of teachers (Rankin, 2022; Sprang et al., 2021). The focus to counter the detrimental impact of STS has been the sole responsibility of the teacher through self-care (Sprang et al., 2021). However, in recent years, there has been a slow shift to also consider workplace factors that may also contribute to STS (Sprang et al., 2021). This includes the need for school administrators to better recognize the impact of STS on teachers and provide protective factors to aid in alleviating STS symptomology.

The high levels of emotional stress shared by public school teachers are compounding teacher shortages nationwide (National Education Association, 2022). New and veteran public school teachers are contemplating leaving education because of increased and extreme emotional stress. School districts and local school campuses that support strategies of encouragement, hope, and self-efficacy can aid in mitigating STS within the workplace (Sprang et al., 2021).

The mass exit from education goes beyond teachers; bus drivers, custodians, nurses, paraprofessionals, and substitutes are also leaving in masses (National Education Association, 2022). Although low pay is one reason for leaving the profession, it is not the only reason. Other

strains creating high emotional stress include demands of high-stakes testing, increased workload, lack of professional respect, shortages forcing teachers to cover and fill the roles of absent teachers, and student behavioral disruptions. However, since COVID-19, teachers have experienced added pressure to meet the emotional, mental, and social needs of their students, resulting from the impact of trauma (National Education Association, 2022; Tirell-Corbin, 2022). As the demand to better manage trauma behaviors exhibited by students increases, teachers are experiencing an increase in symptoms of burnout, exhaustion, and STS (Bakuli & Levin, 2021; Cardoza, 2021; McLean et al., 2016; Streeter, 2021). Teachers believe these demands are placed upon them without adequate collaboration, support, and training, which causes teachers to feel ineffective and erodes their sense of professional teacher self-efficacy (Tirell-Corbin, 2022).

Self-Efficacy

Self-efficacy refers to the belief that an individual has in their capability to organize and implement actions necessary to manage challenging situations as they arise (Bandura, 1977, 1986, 1997). Self-efficacy holistically impacts the individual within behaviors, motivation, and their psychological states (Bandura, 1977; Cherry, 2023). This belief in the ability to succeed influences how a person acts, feels, and thinks regarding their place in the world (Cherry, 2023). Self-efficacy is context specific. For example, an individual may have high self-efficacy in mathematics but low self-efficacy in music (Bandura, 1977; Cherry, 2023). Bandura (1977, 1986, 1997) also suggested that individuals with strong self-efficacy develop a deeper interest in the activities they are a part of, form strong commitments, recover quickly from disappointments, and see problems as tasks to be mastered.

In contrast to individuals with high self-efficacy, individuals with low self-efficacy avoid challenging situations, and they also believe they do not have the capability to work through and

overcome difficult situations and tasks (Bandura, 1977; Cherry, 2023). Further, these individuals continue to focus on the possible negative outcomes and their own personal failings, which can cause them to further lose confidence in their abilities (Bandura, 1997; Cherry, 2023). As a result, these individuals tend to quickly give up and are more likely to experience depression and feelings of failure and inadequacy (Cherry, 2023).

Bandura described four ways self-efficacy is achieved (Bandura, 1977; Cherry, 2023). The most effective way to grow strong self-efficacy is through mastery experiences. In other words, as an individual experiences a successful performance of a task, personal self-efficacy strengthens. In contrast, avoiding a challenge can decrease self-efficacy (Bandura, 1977, 1986, 1997; Cherry, 2023). Another way to build self-efficacy is through social modeling. Seeing others succeed at challenging tasks increases the belief in oneself that they also possess the capability to succeed. Bandura (1977) also claimed that individuals could be persuaded to believe they possess within them the ability to succeed. Encouragement from others helps to overcome self-doubt and focus on putting forth their best effort (Bandura, 1977, 1986, 1997). Finally, individual emotional reactions play a role in self-efficacy (Bandura, 1977; Cherry, 2023). Emotional states, moods, physical reactions, and stress levels of an individual all impact what the individual believes about their abilities. Bandura (1977, 1986, 1997) asserted that, although emotional and physical reactions are important, the perception and interpretation of the individual create the greatest impact.

Teacher Self-Efficacy

Teacher self-efficacy and teaching efficacy are distinctly different concepts. Teacher self-efficacy focuses on the extent to which teachers evaluate their abilities to bring positive changes amid unforeseen difficulties with students (Lazarides et al., 2020). Teaching efficacy is the belief

of the teacher regarding the possible consequences of performing tasks at a certain level of competence (Lazarides et al., 2020; Tschannen-Moran & Woolfolk Hoy, 2001).

Research reveals the need for self-efficacy among teachers (Bandura, 1977; Barni et al., 2020; Lazarides et al., 2020). Teacher self-efficacy plays an important role, enabling teachers to accomplish tasks, respond positively to student challenges and difficulties, and set and accomplish goals (Hussain et al., 2022). The theory of self-efficacy is a subset of Bandura's SCT of behavioral change (Bandura, 1977; Barni et al., 2020). Self-efficacy is the belief of teachers in their ability to fulfill school obligations, regulate classroom organization, and perform related instructional tasks associated with their professional careers and the academic success of their students (Barni et al., 2020; Lazarides et al., 2020). Teacher self-efficacy is not only knowing which classroom achievements lead to desired outcomes but also believing in the ability to produce necessary actions that achieve positive outcomes, even when students are difficult and unmotivated (Bandura, 1977; Barni et al., 2020; Lazarides et al., 2020; Tschannen-Moran & Woolfolk Hoy, 2001).

Teacher self-efficacy plays an important role in influencing motivation, personal well-being, and student achievement (Barni et al., 2020). Teacher self-efficacy forms the teacher's behaviors, emotions, and thoughts (Bandura, 1997; Poulou et al., 2019). Teacher self-efficacy beliefs are performance and context-specific; therefore, they change according to the types of conditions in the classroom, students, and tasks (Poulou et al., 2019; Tschannen-Moran & Woodfolk Hoy, 2001). Rural teachers are likely to feel less efficacious because of a lack of resources and constraints within the school (Lazarides et al., 2020). Rural schools and teachers receive minimal aid from state resources, and money allocated has specific ways in which it must be spent (Hill, 2015). Rural teachers often feel isolated because there is a lack of opportunities to

attend professional development and learn from colleagues (Blanchet & Bakkegard, 2018; Hill, 2015).

Positive teacher self-efficacy is linked to the ability to adapt to classroom situations, cope with stress, experience positive emotions, and not be overly critical of themselves (Aðalsteinsson et al., 2014). Teachers who have high self-efficacy provide their students who are struggling with the necessary help to succeed, praise students when the work is complete, and spend more time on specific learning tasks (Aðalsteinsson et al., 2014). Further, teachers who possess high self-efficacy believe they can reach all learners by encouraging additional work and utilizing proper methods (Aðalsteinsson et al., 2014). Teachers with high self-efficacy view themselves as problem solvers and are motivated to continue to preserve and work with students when current strategies seem ineffective (Aðalsteinsson et al., 2014).

Conversely, teachers with low self-efficacy connect low grades to low-performing student ability. Low self-efficacy among teachers causes them to believe they do not have the ability to help low-achieving students succeed (Aðalsteinsson et al., 2014). Teachers with low self-efficacy also believe attempts to help in the learning and success of low-performing students make little difference against the maladaptive effects of the environment students experience outside of school (Aðalsteinsson et al., 2014; Bandura, 1997). In addition, teachers with low self-efficacy are more authoritarian in their organization. These teachers are very rigid in classroom discipline and rules. They do not pay attention to student motivation and, therefore, rely on external motivations and negative restrictions (Aðalsteinsson et al., 2014; Bandura, 1997, p. 241). Teachers with low self-efficacy also avoid problems and are inward-focused. These teachers also focus on and blame their own personal failings and negative results rather than the ability to work through difficult situations. These teachers easily lose confidence in their

abilities (Bandura, 1997; Cherry, 2023). Teachers with low self-efficacy become exasperated and give up quickly when challenges arise. This causes these teachers to experience feelings of failure and depression. Moreover, because of the continuous emotionally stressful situations, teachers with low self-efficacy do not respond well to challenges and are less emotionally resilient (Cherry, 2023).

Despite the plethora of research on teacher self-efficacy, there is minimal research specifically focusing on self-efficacy and emotional stress among rural public school teachers (Shoulders & Krei, 2015). There is also limited information describing the characteristics, behaviors, and motivations regarding self-efficacy and rural teachers.

Rural Public School Teachers

Any county with a population of 150,000 or less is considered a rural population in Texas (Monk, 2023). This is compared to rural school districts, defined as any district with a student population of less than 300 (Texas Education Agency, 2017). Texas has more than 2,000 campuses classified as rural campuses. Additionally, Texas has more than 20% of campuses in rural areas, which leads the nation (Texas Rural Task Force, 2017).

Poverty is considered one of the main ACEs in rural areas (Canales et al., 2008; Eppley, 2015). The poverty rate in rural areas is 17.3% compared to 13.9% in urban areas (Rural Health Hub [Texas], 2023). Rural areas lack resources to mitigate poverty, which increases emotional stress in teachers and, in many cases, increases traumatic experiences among the children living in these areas (Blitz et al., 2020; Kaiser et al., 2017). Students arriving at school from impoverished areas have an increase in emotional, mental health, and social difficulties (Blitz et al., 2020; Kaiser et al., 2017). However, in these poverty-stricken areas, mental health services

are not readily available, which compounds the emotional stress on the classroom teacher to support and engage effectively with these students (Blitz et al., 2020; Kaiser et al., 2017).

Advocates for rural education insist that rural schools are the forgotten minority related to receiving adequate resources for students and teachers (Azano & Stewart, 2015). Combating rural stereotypes is an additional factor that creates emotional stress for the rural public school teacher. These teachers fight against the historical concept that rural schools are sub-standard, second-class, and lag urban and suburban education (Corbett, 2013; Manley, 2018). Rural teachers experience emotional stressors because of a lack of resources and a lack of professional development regarding ways to mitigate the deleterious impact of poverty. Further, emotional stressors are compounded for rural public school teachers, as many fulfill multiple roles. For example, rural public school teachers take on additional roles as coaches, crisis counselors, custodians, librarians, lunchroom monitors, maintenance staff, nurses, and technology assistants (Canales et al., 2008; Eppley, 2015). Therefore, rural teachers are at risk for STS and negative self-efficacy because of these multiple roles and limited resources to best manage their needs and the needs of their students.

Teacher Experience

There are currently over 4 million teachers in the United States with approximately 15 years of teaching experience (Staake, 2023; U.S. Census Bureau, 2017). Teacher experience has been found to enhance tools and skills that aid in coping with emotional stressors (Staake, 2023). According to Bandura (1977), teacher self-efficacy is developed by mastery experiences, social modeling, positive encouragement, and individual emotional reactions that can only be experienced when teaching. As such, teacher experience impacts teacher self-efficacy in the classroom.

Research has also shown that teacher experience plays a role in the cognitive processing ability to analyze their teaching tasks and assess their own teaching competency (Tschannen-Moran & Woodfolk Hoy, 2001). Additional studies suggest that teachers with more than five years of teaching experience are better at identifying behavioral patterns to gain a deeper understanding of the situation to resolve a problem (Kim & Klassen, 2018). These experienced teachers focus on using analytical and evaluative strategies that allow them to better interpret behavioral challenges from their students (Kim & Klassen, 2018). This ability to identify behavioral patterns also increases teacher self-efficacy, which tends to reduce teacher stress (Kim & Klassen, 2018). However, the ability to better identify student behavior is not often found among teachers with less than five years of teaching experience, thus decreasing teacher self-efficacy and creating additional emotional stress (Kim & Klassen, 2018). In part, this is because of the limited visual focus of new teachers who tend to fixate on one problem, which impacts their ability to notice other classroom needs (Kim & Klassen, 2018; Van den Bogert et al., 2014).

Studies have also shown that new teachers address classroom struggles as defiant behaviors that must receive an immediate consequence rather than considering the underlying issues of the problem (Swanson et al., 1990). This lack of teacher experience and missing problems in the classroom decrease teacher self-efficacy and increase emotional stress (Swanson et al., 1990). Teachers with less than five years of experience essentially lack the ability to interpret the classroom and behavioral difficulties of their students, thus undermining positive teacher self-efficacy and the ability to mitigate emotional stress (Kim & Klassen, 2018; Swanson et al., 1990).

Teacher experience has been found to positively connect with student academic gains (Kini & Podolsky, 2017). Academic gains are highest at the start of the teaching career and

continue to be significant throughout the duration of teaching (Kini & Podolsky, 2017). Further, as teachers gain experience, their students learn more and teachers also improve in other ways, including student attendance as positive teacher and student relationships are developed (Kini & Podolsky, 2017). Research also found that teacher effectiveness increases as the teacher accumulates experience. Additionally, as teacher experience increases, so too do coping skills that are necessary to mitigate the high emotional stress and negative teacher self-efficacy (Dias et al., 2021; Kini & Podolsky, 2017; Mohamed, 2015).

Several studies have found that years of teaching experience can impact high emotional stress and increase teacher self-efficacy, with the highest impact occurring within the first five years of teaching (Dias et al., 2021; Mohamed, 2015). This is because teachers with less than five years of experience have not adequately learned to cope with the daily emotional stressors from within the classroom (Kyriacou, 2001). Research found this lack of teaching experience also impacts classroom management procedures. This impact in the classroom is particularly related to managing student trauma-based behavior reactions (Dias et al., 2021; Kyriacou, 2001; Mohamed, 2015). Additional research found that experienced teachers are better able to prevent classroom disruptions through an increased ability to notice behavior and visual cues (Wolff et al., 2017). However, new teachers have not yet developed this ability and instead react to the disruption rather than continue to provide instruction (Wolff et al., 2017). As a result, because of the lack of coping skills and the lack of developed classroom management skills, teachers with less than five years of experience can be more susceptible to emotional stress and STS symptomology, therefore decreasing teacher self-efficacy (Kyriacou, 2001).

Summary

Rural public school teachers experience many emotional stressors as the rural public school teacher takes on multiple roles to fill the needs of the school. These added roles increase the emotional stress of the rural teacher and cause a greater risk for these teachers to experience low self-efficacy and STS. At the same time, rural students and districts experience high poverty rates, which causes increased trauma behavior in the classroom because poverty is considered an ACE (Canales et al., 2008; Eppley, 2015). As a result, the rural public school teacher is called upon to appropriately engage and support the mental health of the student with limited knowledge, resources, and skills. Additionally, rural public school teachers must contend with rural stereotypes that include rural schools being sub-standard, narrow, prejudiced, and a reluctance to change.

The continued exposure to the trauma experiences of the student takes a toll causing multiple reactions in the rural teacher. Teachers can experience physical symptoms such as exhaustion, fatigue, headaches, high blood pressure, gastrointestinal issues, and sleep disturbances (Burke-Harris, 2018; Engel, 1977; van der Kolk, 2015). The rural public school teacher may also experience emotional and psychological struggles, such as an increase in anxiety, cynicism, depression, and frustration. Finally, rural teachers exposed to emotional stress may withdraw and isolate themselves from friends, family, and colleagues. The teachers may stop participating in activities they used to enjoy, and the resulting isolation intensifies their physical and emotional difficulties (Burke-Harris, 2018; Engel, 1977; van der Kolk, 2015). These emotional struggles result in cynicism, depersonalization, a disconnect from students, high absenteeism, and negative self-efficacy.

As rural public school teachers learn about the traumatic experiences of their students, the daily reminders of student trauma may result in a diagnosis of STS. STS symptomology is similar to PTSD, which can cause teachers to avoid triggers that remind them of personal trauma. The rural public school teacher can experience intrusive thoughts resulting in nightmares and sleep disturbances. Further, the teacher becomes hypervigilant and is overcome with concern for the safety of their students (Cieslak et al., 2014; Everall & Paulson, 2004; Malach-Pines, 2005).

The high levels of emotional stress decrease the self-efficacy of the rural teacher, which can cause STS symptomology. Teachers begin to doubt their ability to impact the student positively. Low teacher self-efficacy is linked to low grades and low-performing student ability. Low self-efficacy among teachers also causes them to believe they do not possess the ability to help low-achieving students (Aðalsteinsson et al., 2014). Teachers with low self-efficacy believe any attempts to assist in the learning and success of low-performing students have very little influence compared to the maladaptive effects students experience in their homes and environments (Aðalsteinsson et al., 2014; Bandura, 1997). In addition, teachers with low self-efficacy are more authoritarian in their organization. These teachers are very rigid in classroom discipline and rules. They do not pay attention to student motivation and, therefore, rely on external motivations and negative restrictions (Aðalsteinsson et al., 2014; Bandura, 1997). Teachers with low self-efficacy also avoid problems and become focused inwardly. These teachers focus on personal failings and negative outcomes rather than the ability to work through difficult situations (Bandura, 1997; Cherry, 2023). They also quickly lose confidence in their abilities. Teachers with low self-efficacy are likely to experience feelings of failure and depression, resulting in a disconnect from students, colleagues, and family. Moreover, because of

the continual emotionally stressful situations, teachers with low self-efficacy do not respond well to stress and are less emotionally resilient (Cherry, 2023).

Chapter Three: Methodology

Overview

The purpose of this study was to investigate if teacher experience moderates the relationship between STS and teacher self-efficacy among rural public school teachers. Although there is abundant research regarding teacher self-efficacy, there is minimal research examining the moderating effect of the teacher experience between STS and teacher self-efficacy among rural public school teachers.

This chapter provides the research design used to investigate the relationship between STS and teacher self-efficacy among rural public school teachers. Research on methodology provided evidence of why the correlational design was best suited for this study. After describing the design, research questions are presented along with the hypothesis. Further, the chapter included the participants, the setting, the procedures, and how the data were analyzed. The chapter ends with a description of the variables and results at length.

Design

This study used a correlational design, also known as a non-experimental design (Price et al., 2017). The correlational design was best suited for this study because it allowed the opportunity to examine the moderating effect of teacher experience on the relationship between STS and teacher self-efficacy among rural public school teachers. Further, the correlation design was best suited for this study because it revealed a relationship between the variables. Thus, the scores of one of the variables were used to predict the scores of the other as a statistical regression (Price et al., 2017). This correlational design study measured two variables: teacher self-efficacy and STS among rural public school teachers. The design measured the relationship between three STS subscales of avoidance, instruction, and arousal and TSES subscales of

classroom management, instructional practices, and student engagement, creating essentially a three-by-three factorial design. These variables addressed the lack of current research and assessed the statistical relationship between the variables.

Using a correlational design established the reliability and validity of measurements (Price et al., 2017). This study design frequently has a higher external validity than an experimental research design study (Price et al., 2017). Additionally, correlational design studies are usually low in internal validity because the variables cannot be manipulated or controlled, which results in higher external validity (Price et al., 2017). The results of this correlational study reflected relationships that exist in the real world between STS and teacher self-efficacy among rural public school teachers (Price et al., 2017).

Research Question

The study investigated if teacher experience moderates the relationship between STS and teacher self-efficacy among rural public school teachers. Therefore, the following research questions and hypotheses guided this study.

RQ1: Does teacher experience moderate the relationship between STS and teacher self-efficacy among rural public school teachers?

RQ1(a): Does STS predict teacher self-efficacy rural public school teachers?

RQ1(b): If STS predicts teacher self-efficacy, does teacher experience moderate this effect?

Hypotheses

The following hypotheses for this study were:

Hypothesis 1(a): Scores on the intrusion subscale of the STS will negatively predict scores on the instructional practices subscale of the TSES.

Hypothesis 1(b): Scores on the intrusion subscale of the STSS will negatively predict scores on the classroom management subscale of the TSES.

Hypothesis 1(c): Scores on the intrusion subscale of the STSS will negatively predict scores on the student engagement subscale of the TSES.

Hypothesis 1(d): Scores on the avoidance subscale of the STSS will negatively predict scores on the instructional practices subscale of the TSES.

Hypothesis 1(e): Scores on the avoidance subscale of the STSS will negatively predict scores on the classroom management subscale of the TSES.

Hypothesis 1(f): Scores on the avoidance subscale of the STSS will negatively predict scores on the student engagement subscale of the TSES.

Hypothesis 1(g): Scores on the arousal subscale of the STSS will negatively predict scores on the instructional practices subscale of the TSES.

Hypothesis 1(h): Scores on the arousal subscale of the STSS will negatively predict scores on the classroom management subscale of the TSES.

Hypothesis 1(i): Scores on the arousal subscale of the STSS will negatively predict scores on the student engagement subscale of the TSES.

Hypothesis 1(j): The overall model will predict a significant amount of variance in scores on the STS.

Hypothesis 2(a): Scores on the intrusion subscale of the STS will negatively predict scores on the instructional practices subscale of the TSES.

Hypothesis 2(b): If hypothesis 2a is significant, it is predicted that teaching experience will negatively moderate the relationship between scores on the intrusion subscale of the STSS and the instructional practices subscale of the TSES.

Hypothesis 2(c): Scores on the intrusion subscale of the STSS will negatively predict scores on the classroom management subscale of the TSES.

Hypothesis 2(d): If hypothesis 2c is significant, it is predicted that teaching experience will negatively moderate the relationship between scores on the intrusion subscale of the STSS and the classroom management subscale of the TSES.

Hypothesis 2(e): Scores on the intrusion subscale of the STSS will negatively predict scores on the student engagement subscale of the TSES.

Hypothesis 2(f): If hypothesis 2e is significant, it is predicted that teaching experience will negatively moderate the relationship between scores on the intrusion subscale of the STSS and the student engagement subscale of the TSES.

Hypothesis 2(g): Scores on the avoidance subscale of the STSS will negatively predict scores on the instructional practices subscale of the TSES.

Hypothesis 2(h): If hypothesis 2g is significant, it is predicted that teaching experience will negatively moderate the relationship between scores on the avoidance subscale of the STSS and the instructional practices subscale of the TSES.

Hypothesis 2(i): Scores on the avoidance subscale of the STSS will negatively predict scores on the classroom management subscale of the TSES.

Hypothesis 2(j): If hypothesis 2i is significant, it is predicted that teaching experience will negatively moderate the relationship between scores on the avoidance subscale of the STSS and the classroom management subscale of the TSES.

Hypothesis 2(k): Scores on the avoidance subscale of the STSS will negatively predict scores on the student engagement subscale of the TSES.

Hypothesis 2(l): If hypothesis 2k is significant, it is predicted that teaching experience will negatively moderate the relationship between scores on the avoidance subscale of the STSS and the student engagement subscale of the TSES.

Hypothesis 2(m): Scores on the arousal subscale of the STSS will negatively predict scores on the instructional practices subscale of the TSES.

Hypothesis 2(n): If hypothesis 2m is significant, it is predicted that teaching experience will negatively moderate the relationship between scores on the arousal subscale of the STSS and the instructional practices subscale of the TSES.

Hypothesis 2(o): Scores on the arousal subscale of the STSS will negatively predict scores on the classroom management subscale of the TSES.

Hypothesis 2(p): If hypothesis 2o is significant, it is predicted that teaching experience will negatively moderate the relationship between scores on the arousal subscale of the STSS and the classroom management subscale of the TSES.

Hypothesis 2(q): Scores on the arousal subscale of the STSS will negatively predict scores on the classroom management subscale of the TSES.

Hypothesis 2(r): If hypothesis 2q is significant, it is predicted that teaching experience will negatively moderate the relationship between scores on the arousal subscale of the STSS and the student engagement subscale of the TSES.

Participants and Setting

Participants from Texas rural public schools were asked to participate. Participants were contacted via email. Email lists were obtained from a local Education Service Center behavioral specialist representative. Participants were current rural public school teachers in West Texas. Rural public school teachers were emailed an anonymous link that directed them to the

embedded consent form, followed by the sociodemographic survey, Teacher Sense of Self-Efficacy Scale survey, and the STSS survey. The surveys used the Likert scale that allowed the participants to respond to how much each agreed or disagreed with a statement (McCleod, 2023). Additionally, the surveys used Cronbach's alpha to assess the amount of variance among the items being measured (Collins, 2007). The surveys were completed online via Qualtrics, and each participant was given two weeks to complete and submit the surveys. If there had not been a sufficient sample response, a follow-up email would have been sent.

Creswell and Creswell (2019) stated that survey designs allow for the description of attitudes, opinions, and trends of the general population by investigating a smaller sample. A survey design study also aids in answering three types of questions: descriptive questions, questions concerning the relationships between the variables, and questions concerning the predictive relationships between the variables over time (Creswell & Creswell, 2019).

Instrumentation

This study used the Teacher Self-Efficacy Survey Scale developed by Drs. Tschannen-Moran and Woolfolk Hoy (2001), and permission to use the survey was granted via email (see Appendix B). Additionally, this study used the STSS developed by Dr. Bride et al. (2004). Permission was granted via email (see Appendix B).

The participants of this study answered a 24-item self-report survey that focused on teacher self-efficacy. The TSES used a three-point Likert scale with the following options: Very Little, to Some Degree, and Quite a Bit. The survey measured teacher self-efficacy in three areas: instructional practices, classroom management, and student engagement (Nieto et al., 2023). The TSES is the most widely used survey scale to assess teacher self-efficacy and demonstrates high levels of reliability and validity when used among teachers, supporting the use of the survey for

this study (Klassen et al., 2009; Nie, 2012; Nie et al., 2012; Nieto et al., 2023). Moreover, because research supports the internal consistency of the TSES with a Cronbach α = .975, the survey was appropriate for this study (Dinter et al., 2013).

In addition, the participants answered a 17-item self-report that focused on STS. The STSS used a 5-point Likert scale with the following options: Never, Sometimes, About half the time, Most of the time, and Always. Early research used instruments that were developed to examine symptomology among trauma survivors (Bride et al., 2023). Further, these instruments had not been validated, nor were survivors indirectly exposed to trauma, part of the normed groups. Thus, the STSS was developed in response to a lack of instruments that measure secondary trauma among helping professions (Bride et al., 2004). The STSS has been widely used and demonstrates reliability and validity, as well as internal consistency (Bride et al., 2004; Figley, 1995). Cronbach α is the measure most often used to determine internal consistency, and the recommended alpha level should be at least 0.70. Thus, the STSS was appropriate for this study as the Cronbach α is .80 (Bride et al., 2004).

Procedures

Creswell and Creswell (2019) stated that to draw useful inferences from a survey, quantitative research must establish validity. There are three ways to ensure the validity of a survey. The researcher must look for construct validity, content validity, and predictive validity (Creswell & Creswell, 2019). Construct validity asks if the items measure hypothetical concepts. Content validity ensures the items measure the content that is intended to be measured. Finally, predictive validity ensures the scores predict a standard measure (Creswell & Creswell, 2019). The TSES survey and the STSS survey met these content validity measures.

After Liberty University Institutional Review Board (IRB) approval was received, the anonymous link created in Qualtrics was distributed via email to recruit participants from rural public school districts. The email lists were created by a local Educational Service Center behavioral specialist representative. When the participant clicked on the provided link, they were directed to a consent form embedded in the online surveys. As participants provided consent, each was directed to complete the sociodemographic survey, TSES survey, and the STSS survey via Qualtrics. Participants were asked to complete the surveys within two weeks.

Data Analysis

Data Screening

The STS and TSES survey responses were collected from Qualtrics. The responses were analyzed to obtain information needed to determine if teacher experience moderated the relationship between the variables of STS and teacher self-efficacy among rural public school teachers. As suggested by Creswell and Creswell (2019), the first step was to read and then reread the results, looking for patterns that may have revealed the relationship between the variables. Second, the responses were coded to classify, describe, and interpret the data (Creswell & Creswell, 2019). The codes were then placed into categories of relationships between the variables.

The analysis of the data was conducted using the computer program SPSS Statistics. A descriptive analysis of the data for the variables was conducted (Creswell & Creswell, 2019). This analysis revealed the mean, range of scores, and standard deviation for the variables (Creswell & Creswell, 2019).

Variables

The variables measured were teacher experience, STS, and teacher self-efficacy using the Pearson correlation coefficient, Pearson's *r* (Turney, 2024). Pearson's *r* is a descriptive statistic used to summarize the characteristics of a dataset. Additionally, Pearson's *r* is an inferential statistic that can test whether there is a significant relationship between two variables (Turney, 2024). Pearson's *r* described the strength and direction of the linear relationship between STS and teacher self-efficacy (Turney, 2024). For this study, STS was the independent variable, and teacher self-efficacy was the dependent variable.

Analysis and Reporting

The SPSS software program was used to complete a Pearson *r* data analysis. Pearson's *r* indicated the correlation between the variables of STS and teacher self-efficacy. The results may indicate a perfect positive correlation ($r = 1$) or a perfect negative correlation ($r = -1$). The results may also show a strong positive correlation ($r > .5$) or a strong negative correlation ($r < -.5$). Finally, the results may indicate a weak positive correlation ($.3 > r > 0$) or a weak negative correlation ($0 > r > -.3$). The results and the interpretation allow for the drawing of conclusions from the research question and hypothesis (Turney, 2024). The results should relate to the overall problem and help in finding a statistical relationship to show the moderating effect of teacher experience on the relationship between STS and teacher self-efficacy (Leedy & Ormrod, 2018, p. 337).

Summary

This chapter described the correlational research design used to determine whether teacher experience moderates the relationship between STS and teacher self-efficacy among rural

public school teachers. The research question set out to understand how STS impacts teacher self-efficacy among rural public school teachers.

Research has demonstrated the validity, reliability, and internal consistency (Cronbach's α) of the TSES and STSS surveys (Bride et al., 2004; Nie, 2012). Permission from the authors of the surveys was obtained (appendices). Ethical considerations, informed consent, participant anonymity, and the recruitment email followed the IRB procedures. IRB approval was obtained, and the data were analyzed using Creswell and Creswell's (2019) technique. Pearson's *r*, the inferential statistic, was used to analyze the relationship between STS and teacher self-efficacy.

Chapter Four: Findings

Overview

This study used a correlational design to determine if teacher experience moderated the relationship between STS and teacher self-efficacy among rural public school teachers. Results from the predictor variable STS were received via the STSS survey. Results from the criterion variable of teacher experience were received via the TSES survey. The statistical analysis measured the relationship of three STS subscales (i.e., avoidance, instruction, arousal) between the TSES subscales (i.e., classroom management, instructional practices, and student engagement). The focus of the analysis created a three-by-three factorial design. Thirty-four participants (n = 34) completed all three surveys: sociodemographic, STSS, and TSES via Qualtrics. This chapter included the data screening, descriptive statistics, research question, hypotheses, and assumption testing used in the study.

Data Screening

Participant responses were used to determine if there was a significant statistically predictive relationship between STS and teacher self-efficacy, and if so, did teacher experience moderate this effect? Once the data were collected and analyzed, the results showed no significant relationship between STS and teacher self-efficacy.

Thirty-seven participants responded to the surveys via Qualtrics. As the responses were scanned, three responses were removed because of an incomplete survey response. The completed data were scanned for any inconsistencies, and then the data was coded and entered into SPSS.

Descriptive Statistics

Descriptive statistics were used for each of the sociodemographic variables to determine frequencies. The sample total was 34 participants (n = 34) of which 32 reported female (94.1%) and two reported mail (5.9%) (See Table 2). All participants (n = 34) reported as White (See Table 3). Frequencies were calculated with tables for each sociodemograhic variable. Teaching level was reported as 10 participants from Grades PK-3 (29%), 2 participants from Grades 4-5 (6%), 9 participants from Grades 6-8 (27%), and 13 participants from Grades 9-12 (38%) (see Table 4). Total teaching years of experience was reported as 2 participants less than 5 years of experience (5.9%), 9 participants 6-10 (26.5%) years of experience, 8 participants 11-15 (23.5%) years of experience, 4 participants 16-20 (11.8%) years of experience, and 11 participants over 21 years (32.4%) (See Table 5).

Table 2

Gender

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	2	5.9	5.9	5.9
	Female	32	94.1	94.1	100.0
	Total	34	100.0	100.0	

Table 3

Race

	Frequency	Percent	Valid Percent	Cumulative Percent
White	34	100.0	100.0	100.0

Table 4

Grade Level

Grade	Frequency	Percent	Valid Percent	Cumulative Percent
PK-3	10	29.4	29.4	29.4
4-5	2	5.9	5.9	35.3
6-8	9	26.5	26.5	61.8
9-12	13	38.2	38.2	100.0
Total	34	100.0	100.0	

Table 5

Teacher Experience

Years of Experience	Frequency	Percent	Valid Percent	Cumulative Percent
0-5	2	5.9	5.9	5.9
6-10	9	26.5	26.5	32.4
11-15	8	23.5	23.5	55.9
16-20	4	11.8	11.8	67.6
21+	11	32.4	32.4	100.0
Total	34	100.0	100.0	

Research Questions

RQ1: Does teacher experience moderate the relationship between STS and teacher self-efficacy among rural public school teachers?

RQ1(a): Does STS predict teacher self-efficacy in rural public school teachers?

RQ1(b): If STS predicts teacher self-efficacy, does teacher experience moderate this effect?

Results

The first research question in this study was: Does STS predict teacher self-efficacy in rural public schools?

Hypothesis 1a predicted that scores on the intrusion subscale of the STSS would negatively predict scores on the instructional practice subscale of the TSES. A correlational analysis was conducted to examine the relationship between intrusion and instructional practice. Intrusion and instructional practice were found to have a moderate positive linear correlation (r = .049) without significance (p = .784) (see Table A1). Independence of residual errors was confirmed with a Durbin-Watson test (d = 1.703) (see Table A2). A scatterplot showed that the relationship between intrusion and instructional practice was almost nonexistent (see Figure A1). An analysis of standard residuals showed that the data contained no outliers (Std. Residual Min. = −2.433, Std. Residual Max. = 1.597) (see Table A4). Residual plots showed homoscedasticity and normality of the residuals. A post-hoc non-linear regression analysis was conducted to examine how well intrusion could predict instructional practice, $F(1,32) = 0.77$, p = .784, and accounted for only .02 of the variability in instruction with adjusted $R^2 = -.029$. (see Table A2 and A3). The results of the analysis did not support hypothesis 1a.

Hypothesis 1b predicted that scores on the intrusion subscale of the STSS would negatively predict scores on the classroom management subscale of the TSES. A correlational analysis was conducted to examine the relationship between intrusion and classroom management. Intrusion and classroom management were found to have a weak negative linear correlation (r = −0.132) without significance (p = .458) (see Table A5). A scatterplot showed that the relationship between intrusion and classroom management was almost nonexistent (see Figure A2). An analysis of standard residuals showed the data contained no outliers (Std. Residual Min. = −2.506, Std. Residual Max. = 1.640) (see Table A8). Residual plots showed homoscedasticity and normality of the residuals. A post-hoc non-linear regression analysis was conducted to examine how well intrusion could predict classroom management, $F(1,32)$ =

−0.565, p = .458, and accounted for only .01 of the variability in instruction with adjusted R^2 = −.0132 (see Table A6 and A7). The results of the analysis did not support hypothesis 1b.

Hypothesis 1c predicted that scores on the intrusion subscale of the STSS would negatively predict scores on the student engagement subscale of the TSES. A correlational analysis was conducted to examine the relationship between intrusion and student engagement. Intrusion and student engagement were found to have a weak negative linear correlation (r = −0.31) without significance (p = .862) (see Table A9). A scatterplot showed that the relationship between intrusion and student engagement was almost nonexistent (see Figure A3). An analysis of standard residuals showed the data contained no outliers (Std. Residual Min. = −1.776, Std. Residual Max. = 1.352) (see Table A12). Residual plots showed homoscedasticity and normality of the residuals. A post-hoc non-linear regression analysis was conducted to examine how well intrusion could predict student engagement, $F(1,32) = 0.31$ p = .862, and accounted for only .01 of the variability in instruction with adjusted R^2 = −.03 (see Table A10 and A11). The results of the analysis did not support hypothesis 1c.

Hypothesis 1d predicted that scores on the avoidance subscale of the STSS would negatively predict scores on the instructional practice subscale of the TSES. A correlational analysis was conducted to examine the relationship between avoidance and instructional practice. Avoidance and instructional practice were found to have a weak negative non-linear correlation (r = −.046) without significance (p = .795) (see Table A13). A scatterplot showed that the relationship between avoidance and instructional practice was almost nonexistent (see Figure A4). An analysis of standard residuals showed the data contained no outliers (Std. Residual Min. = −2.931, Std. Residual Max. = 1.592) (see A16). Residual plots showed homoscedasticity and normality of the residuals. A post-hoc linear regression analysis was conducted to examine how

well avoidance could predict instructional practice, $F(1,32)= .069$ $p = .795$, and accounted for only .01 of the variability in instruction with adjusted $R^2 = -.029$ (see Table A14). The results of the analysis did not support hypothesis 1d.

Hypothesis 1e predicted that scores on the avoidance subscale of the STSS would negatively predict scores on the classroom management subscale of the TSES. A correlational analysis was conducted to examine the relationship between avoidance and classroom management. Avoidance and classroom management were found to have a weak negative linear correlation ($r = -.155$) without significance ($p = .381$) (see Table A17). A scatterplot showed that the relationship between avoidance and classroom management was almost nonexistent (see Figure A5). An analysis of standard residuals showed the data contained no outliers (Std. Residual Min. = −2.426, Std. Residual Max. = 1.483) (see Table A20). Residual plots showed homoscedasticity and normality of the residuals. A post-hoc non-linear regression analysis was conducted to examine how well avoidance could predict classroom management, $F(1,32)= .790$ $p = .381$, and accounted for only .01 of the variability in avoidance with adjusted $R^2 = -.006$ (see Table A18 and A19). The results of the analysis did not support hypothesis 1e.

Hypothesis 1f predicted that scores on the avoidance subscale of the STSS would negatively predict scores on the student engagement subscale of the TSES. A correlational analysis was conducted to examine the relationship between avoidance and student engagement. Avoidance and student engagement were found to have a strong positive linear correlation ($r = .683$) without significance ($p = .084$) (see Table A21). A scatterplot showed that the relationship between avoidance and student engagement was almost non-linear (see Figure A6). An analysis of standard residuals showed the data contained no outliers (Std. Residual Min. = −1.744, Std. Residual Max. = 1.368) (see Table A24). Residual plots showed homoscedasticity

and normality of the residuals. A post-hoc non-linear regression analysis was conducted to examine how well avoidance could predict student engagement, $F(1,32)= .226$ $p = .084$, and accounted for only .01 of the variability in avoidance with adjusted $R^2 = -.024$ (see Table A22 and A23). The results of the analysis did not support hypothesis 1f.

Hypothesis 1g predicted that scores on the arousal subscale of the STSS would negatively predict scores on the instructional practice subscale of the TSES. A correlational analysis was conducted to examine the relationship between arousal and instructional practice. Arousal and instructional practice were found to have a weak negative linear correlation ($r = -.045$) without significance ($p = .801$) (see Table A25). A scatterplot showed that the relationship between arousal and instructional practice was almost nonexistent (see Figure A7). An analysis of standard residuals showed the data contained no outliers (Std. Residual Min. = −2.485, Std. Residual Max. = 1.590) (see Table A28). Residual plots showed homoscedasticity and normality of the residuals. A post-hoc non-linear regression analysis was conducted to examine how well arousal could predict instructional practice, $F(1,32)= .065$ $p = .801$, and accounted for only .01 of the variability in arousal with adjusted $R^2 = -.029$ (see Table A26 and A27). The results of the analysis did not support hypothesis 1g.

Hypothesis 1h predicted that scores on the arousal subscale of the STSS would negatively predict scores on the classroom management subscale of the TSES. A correlational analysis was conducted to examine the relationship between arousal and classroom management. Arousal and classroom management were found to have a weak negative linear correlation ($r = -.093$) without significance ($p = .602$) (see Table A29). A scatterplot showed that the relationship between arousal and classroom management was non-linear (see Figure A8). An analysis of standard residuals showed the data contained no outliers (Std. Residual Min. = −2.427, Std.

Residual Max. = 1.530) (see Table 32). Residual plots showed homoscedasticity and normality of the residuals. A post-hoc non-linear regression analysis was conducted to examine how well arousal could predict classroom management, $F(1,32) = .277$ $p = .602$ and accounted for only .01 of the variability in arousal with adjusted $R^2 = -.022$ (see Table A30 and A31). The results of the analysis did not support hypothesis 1h.

Hypothesis 1i predicted that scores on the arousal subscale of the STSS will negatively predict scores on the student engagement subscale of the TSES. A correlational analysis was conducted to examine the relationship of arousal and student engagement. Arousal and student engagement were found to have a weak positive linear correlation ($r = .034$) without significance ($p = .849$) (see Table A33). A scatterplot showed that the relationship between arousal and student engagement was non-linear (see Figure A9). An analysis of standard residuals showed the data contained no outliers (Std. Residual Min. = −1.761, Std. Residual Max. = 1.324) (see Table A36). Residual plots showed homoscedasticity and normality of the residuals. A post-hoc non-linear regression analysis was conducted to examine how well arousal could predict student engagement, $F(.037) = .034$ $p = .849$ and accounted for only .01 of the variability in arousal with adjusted $R^2 = -.030$ (see Table A34 and A25). The results of the analysis did not support hypothesis 1i.

The second research question was: If STS predicts teacher self-efficacy, does teacher experience moderate this effect?

STS did not statistically predict teacher self-efficacy, and therefore a moderation analysis was not conducted among these variables.

Summary

The study examined the relationship between three subscales of STS (i.e., intrusion, avoidance, arousal) and three subscales of teacher self-efficacy (i.e., instruction, management, engagement). This created a three-by-three factorial design in which each subscale of STS was tested for a relationship with each subscale of teacher self-efficacy. Hypotheses 1(a-i) were tested using SPSS Pearson's *r* and a simple linear regression, including Durbin-Watson. A scatterplot analysis was also used to test Hypotheses 1(a-i) and this test revealed an almost nonexistent relationship between the variables. Further, Hypotheses 1(a-i) were tested using SPSS ANOVA and Standard Residuals. The findings revealed that STS did not predict teacher self-efficacy. Statistical analysis of the moderating effect of teacher experience on the relationship between STS and teacher self-efficacy was not conducted for Hypotheses 2(a-r) as STS was found to not be a predictor of teacher self-efficacy. Further discussion of these findings is presented in Chapter 5, as well as limitations of the study, and suggestions for future research.

Chapter Five: Conclusions

Overview

Chapter Five provided the findings, implications, and limitations of the results of this study considering the literature surrounding STS among public school teachers, teacher self-efficacy, rural public schools, and rural public school teachers. The chapter included theoretical and practical implications of the findings. The chapter also provided the study's limitations and concludes with recommendations for future research.

Discussion

The purpose of this study was to investigate whether teacher experience moderated the relationship between STS and teacher self-efficacy among rural public school teachers. This study used a correlational design to determine if teacher experience moderated the relationship between STS and teacher self-efficacy among rural public school teachers. The predictor variables for the study were the STS subscales of intrusion, avoidance, and arousal. The criterion variables for the study were teacher experience subscales of instruction, management, and engagement. The sample comprised 34 rural public school teachers who completed an anonymous online survey via Qualtrics. Pearson's *r* and a simple linear regression analysis were tested on participant data using SPSS.

The study used the STSS with a five-point Likert scale with the following options: Never, Sometimes, About half the time, Most of the time, and Always. Early research used instruments that were developed to examine symptomology among trauma survivors (Bride et al., 2023). Further, these instruments had not been validated, nor were survivors indirectly exposed to trauma as part of the normed groups. Thus, the STSS was developed in response to a lack of instruments that measured secondary trauma among helping professionals (Bride et al., 2004).

The STSS has been widely used and demonstrates reliability, validity, and internal consistency (Bride et al., 2004; Figley, 1995). Cronbach α is the measure most often used to determine internal consistency, and the recommended alpha level is ≥ .70. Thus, the STSS was appropriate for this study, as the Cronbach α was .80 (Bride et al., 2004).

The study also used the TSES with a three-point Likert scale with the following options: Very Little, Some Degree, and Quite a Bit. The survey measured teacher self-efficacy in three areas: instructional practices, classroom management, and student engagement (Nieto et al., 2023). The TSES is the most widely used survey scale to assess teacher self-efficacy and demonstrates levels of reliability and validity when used among teachers, supporting the use of the survey for this study (Klassen et al., 2009; Nie, 2012; Nie et al., 2012; Nieto et al., 2023). Moreover, because research supported the internal consistency of the TSES with a Cronbach α = .975, the survey was appropriate for this study (Dinter et al., 2013).

The research questions for this study were:

RQ1: Does teacher experience moderate the relationship between STS and teacher self-efficacy among rural public school teachers?

RQ1(a): Does STS predict teacher self-efficacy in rural public school teachers?

RQ1(b): If STS predicts teacher self-efficacy, does teacher experience moderate this effect?

The study measured three subscales of intrusion, avoidance, and arousal in the STSS to identify if they negatively predicted three subscales of instruction, management, and engagement in the TSES. The study used the STSS and the TSES to adequately measure if the STS subscales negatively predicted the subscales of teacher self-efficacy. This study used a three-by-three factorial design and tested multiple hypotheses. The first three hypotheses tested the STS

subscale of intrusion with each of the three teacher self-efficacy subscales (i.e., instruction, management, and engagement).

Hypothesis 1(a): Scores on the intrusion subscale of the STSS will negatively predict scores on the instructional practices subscale of the TSES. A Pearson's *r* analysis was used in SPSS, and the value was .784 ($p = .784$; see Table A1).

Hypothesis 1(b): Scores on the intrusion subscale of the STSS will negatively predict scores on the classroom management subscale of the TSES. A Pearson's *r* analysis was used in SPSS, and $p = .458$ (see Table A5).

Hypothesis 1(c): Scores on the intrusion subscale of the STSS will negatively predict scores on the student engagement subscale of the TSES. A Pearson's *r* analysis was used in SPSS, and $p = .862$ (see Table A9).

This study found no significant relationship between intrusion and the TES subscales of instructional practices, classroom management, and student engagement, thus rejecting the hypotheses. However, some studies have found a relationship between intrusion and teacher self-efficacy. Using a larger sample size, Hydon et al. (2015) found through qualitative research that many teachers suffered from intrusive thoughts, including nightmares that disrupted sleep, constant worry, and images. Hydon et al. (2015) found higher levels of depression among rural public school teachers than urban ones, with 10% reporting levels that would lead to a recommendation of treatment (Hinds et al., 2015). Biddle (2022) found that rural educators experienced increased intrusive thoughts because of a lack of financial mental health resources for students, resulting in lower teacher self-efficacy. Additionally, intrusive thoughts caused teachers to become irritable and short-tempered, resulting in a disruption of effective classroom instruction and management (Hydon et al., 2015). Ebardo et al. (2024) also found that intrusive

thoughts among educators have increased since the COVID-19 pandemic. The increase in intrusive thoughts impacted teacher mental health, resulting in difficulties with instruction, classroom management, and student engagement. This finding resulted from the researchers using a larger sample size and the Impact of Event Scale-Revised to research intrusion, avoidance, and hyperarousal among educators (Ebardo et al., 2024). Thus, with larger sample sizes and different research approaches, intrusion can negatively affect teacher classroom instruction, management, and the ability to engage students (Ebardo et al., 2024).

The second set of hypotheses tested focused on the STS subscale of avoidance:

Hypothesis 1(d): Scores on the avoidance subscale of the STSS will negatively predict scores on the instructional practices subscale of the TSES. Using SPSS, Pearson's *r* was tested and resulted in a *p*-value of .795 ($p = .795$; see Table A13).

Hypothesis 1(e): Scores on the avoidance subscale of the STSS will negatively predict scores on the classroom management subscale of the TSES. Pearson's *r* analysis was tested and found a *p*-value of .381 ($p = .381$; see Table A17).

Hypothesis 1(f): Scores on the avoidance subscale of the STSS will negatively predict scores on the student engagement subscale of the TSES. After running Pearson's *r*, the *p*-value equaled .638 ($p = .638$; see Table A21).

Thus, the findings for the STS subscale of avoidance negatively predicting the TES subscales of instructional practices, classroom management, and student engagement were non-significant. The hypotheses were rejected.

Using the Impact of Event Scale-Revised test and a larger sample size, Ebardo et al. (2024) found that teacher avoidance increased after the COVID-19 pandemic, resulting in an increase in sadness. The researchers found this negatively impacted teacher self-efficacy (Ebardo

et al., 2024). Additionally, Hinds et al. (2015) found that teacher avoidance caused disruptions in student engagement. Using a large sample size and the Teacher Acceptance & Action Questionnaire, the researchers found avoidance increased teacher anxiety and depression. According to the researchers, over 60% of teachers experienced depression and demonstrated depressive behaviors (Hinds et al., 2015). Female teachers who have taught 11-15 years experienced anxiety and depression at higher rates than their counterparts, which was found to contribute to lower teacher self-efficacy (Lee & Lai, 2020). As a result, the avoidance, characterized by depression, led to negative classroom instruction and management and had a poor outcome on student engagement (Hinds et al., 2015). Therefore, with larger sample sizes and different research survey scales, avoidance negatively affects teacher classroom instruction, management, and the ability to engage students.

The final set of hypotheses tested focused on the STS subscale of arousal.

Hypothesis1(g): Scores on the arousal subscale of the STSS will negatively predict scores on the instructional practice subscale of the TSES. Using SPSS, Pearson's *r* was used to test the hypothesis. Pearson's *r* analysis equaled -.045 and $p = .801$, finding a non-significant relationship (see Table A25).

Hypothesis 1(h): Scores on the arousal subscale of the STSS will negatively predict scores on the classroom management subscale of the TSES. Pearson's *r* equaled -.093 and $p = .602$, finding the relationship to be non-significant (see Table A29).

Hypothesis 1(i): Scores on the arousal subscale of the STSS will negatively predict scores on the student engagement subscale of the TSES. The result was $p = .984$, and Pearson's *r* equaled .034 (see Table A33). As a result, the hypotheses STS subscale of arousal and student

engagement negatively predicting the teacher self-efficacy subscales was non-significant and thus rejecting the hypotheses.

However, using the Impact of Event Scale-Revised, Hinds et al. (2015) found that 45% of respondents indicated symptoms of hyperarousal. Hinds et al. (2015) explained the detrimental effects this has on teachers' mental health, resulting in deteriorating teacher self-efficacy.

Implications

The results of this study added to the current literature concerning a connection between the stress levels of educators and teacher self-efficacy. In recent years, there has been an increased consideration of STS in educators. Though the field of study in education specifically is still rather new, there have been studies that have identified STS as prevalent in educators (Borntrager et al., 2012; Schepers, 2017; Schepers & Young, 2023). However, there is a dearth of literature to date that investigates STS, teacher self-efficacy, and rural public school teachers. In fact, no supporting research only investigates STS, teacher self-efficacy, and rural public school teachers. Once the focus shifts to Texas, there is even less research, although Texas has the highest rural public school population in the nation. Studies that examined teacher self-efficacy describe the emotional, physical, and psychological impacts of stress and how it is manifested in anxiety, depression, and disrupted sleep (Borntrager et al., 2012; Burke-Harris, 2018; Ebardo et al., 2024; Fleckman et al., 2022; Makadia et al., 2017).

This study may raise awareness of the gap in measuring STS among educators. PTSD and STS are similar; yet, two symptoms of PTSD are negative cognition and mood, which are not measured on the STS scale. This is important, as many educators are showing symptoms of anxiety, depression, negative cognition, and mood. Therefore, this study highlighted the necessity of developing a single STS measure that includes questions regarding negative

cognition and mood among educators. The study may also bring awareness to the lack of mental health resources and funding among rural public schools because of the high stress levels experienced by rural teachers.

Limitations

This study had several limitations that could have impacted its findings. First, while the minimum sample size requirement for the study was met, it was not representative of the broader rural public school teachers in Texas. According to the most current data, there were approximately 633,000 rural public school teachers. The sample for the study was 34 participants, which is less than 1% of the total rural-teacher population (Cai, 2023). Although the data showed no significant relationship between STS and teacher self-efficacy, there is not enough evidence since the sample size was underpowered in this study to support the hypotheses (Visentin et al., 2020). The lack of responses could also be attributed to the timing of surveys emailed.

Approval from the IRB was given in early June, just after school was dismissed for the summer. Many teachers take a break from work-related responsibilities after school is released for the summer; therefore, many do not check school emails. A second limitation is the lack of diversity in the responses. All 34 (100%) respondents identified as White. The ethnic demographics are representative of rural West Texas in which data show 79% of rural teachers are White (Horn et al., 2021). However, this is not representative of the state of Texas. The Texas teacher workforce comprises 53% White and 47% minority teachers (Texas Education Agency, 2023).

A third limitation was the use of self-report instruments, which could result in social desirability bias or response bias, where participants tend to present themselves in a positive light

rather than reveal their real beliefs (Gall et al., 2007). Rural public school teachers who participated in this study may have reported a more desirable view of themselves or provided responses they believed were expected, resulting in inaccurate data.

A fourth limitation and possible threat to validity was the ratio of female to male participants. The study included 32 females (94.1%) and 2 males (5.9%). Although gender was not a variable of interest, a more balanced distribution of participants would have been preferable. However, these demographics reflected the current Texas teacher workforce. Of the 381,152 teachers employed in the state of Texas, 75.48% were female and 24.52% were male (Landa, 2024).

Recommendations for Future Research

Based on the limitations and findings of this study, the following are recommendations for future research. One recommendation for future research is to increase the sample size. A larger sample size would better represent the rural public school teacher population, thus providing more accurate results (Andrade, 2020). Larger sample sizes have more reliable results, smaller margins of errors, and lower standard deviations, thus leading to higher confidence levels and more accurate results (Andrade, 2020; Charlesworth Author Services, 2022). Further, a larger sample size would provide a more diverse group of participants, including a higher percentage of minority educators and male educators.

Another recommendation is to include geographic location as a part of the sociodemographic survey. Rural populations are diverse. This study focused on West Texas; however, future studies could include all parts of Texas.

The study could be replicated during the academic school year, giving all current rural public school teachers the opportunity to participate. Because the surveys were sent out to

educators after school dismissed, there were a limited number of responses. Additionally, this would allow participants to consider their current emotional state with current students rather than attempting to remember how the school year was because of being on summer break and not attending to work-related situations.

Many studies have primary and secondary hypotheses (Luo, 2016). A deeper examination of the multiple hypotheses would benefit future research. Teacher experience should be considered when examining the STS and TSES subscales. Additional testing could include the average of STS subscales for teachers with over 16 years of experience in comparison to the average of STS subscales for teachers with less than 5 years of experience. The same could be said for the TSES subscales. This would no longer consider teacher experience as a moderating effect but would provide additional insight into the relationship between STS and teacher self-efficacy. A streamlined measure for stress and STS is necessary. The current STS scale does not include questions about negative cognition and mood. These conditions are associated with anxiety and depression and are not measured on the STSS.

Finally, external validity was also explored as a possible limitation. The generalizability of the study was limited to 34 completed surveys. For an independent samples *t*-test based on a significance level of $\alpha = .05$ and a statistical power of .7 with a medium effect size, the minimum sample size needed is 100 (Gall et al., 2007). Although 34 met the minimum requirements for this study, the researcher would have preferred a much larger number of participants. The limitations were considered throughout the study, and every effort was made to minimize the impact. However, because of the type of study, many of the limitations were out of the researcher's control.

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Appendix A: Results Analysis

Hypothesis 1(a): Scores on the intrusion subscale of the STS will negatively predict scores on the instructional practices subscale of the Teacher Efficacy Scale (TSES).

Table A1

Intrusion and Instruction Pearson's r

		Intrusion	Instruction
Intrusion	Pearson correlation	1	.049
	Sig. (2-tailed)		.784
	N	34	34
Instruction	Pearson correlation	.049	1
	Sig. (2-tailed)	.784	
	N	34	34

Table A2

Intrusion and Instruction Durbin-Watson

Model	*R*	R^2	Adjusted R^2	Std. Error of the Estimate	Durbin-Watson
1	.049[a]	.002	-.029	.25105	1.703

Notes. a. Predictors: (Constant), Intrusion, b. Dependent Variable: Instruction.

Figure A1

Intrusion and Instruction Scatterplot

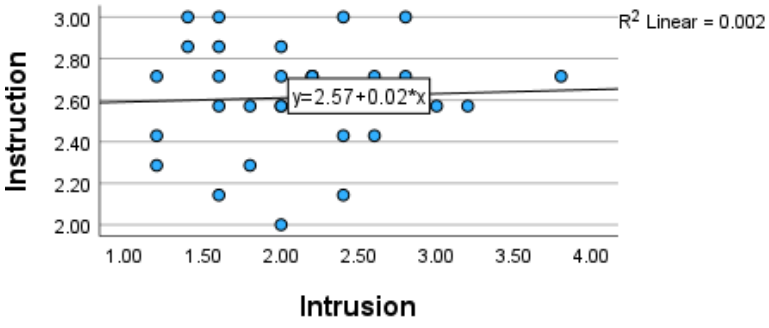

Table A3

Intrusion and Instruction ANOVA

Model		Sum of Squares	*df*	Mean Square	*F*	Sig.
1	Regression	.005	1	.005	.077	.784[b]
	Residual	2.017	32	.063		
	Total	2.022	33			

Notes. a. Dependent Variable: Instruction. b. Predictors: (Constant), Intrusion.

Table A4

Intrusion and Instruction Residuals

	Minimum	Maximum	Mean	SD	*N*
Predicted value	2.5950	2.6465	2.6134	.01209	34
Residual	-.61088	.40099	.00000	.24721	34
Std. predicted value	-1.522	2.735	.000	1.000	34
Std. residual	-2.433	1.597	.000	.985	34

Note. a. Dependent Variable: Instruction.

Hypothesis 1(b): Scores on the intrusion subscale of the STSS will negatively predict scores on the classroom management subscale of the TSES.

Table A5

Intrusion and Management Pearson's r

		Intrusion	Management
Intrusion	Pearson correlation	1	-.132
	Sig. (2-tailed)		.458
	N	34	34
Management	Pearson correlation	-.132	1
	Sig. (2-tailed)	.458	
	N	34	34

Table A6

Intrusion and Management Durbin-Watson

Model	*R*	R^2	Adjusted R^2	Std. Error of the Estimate	Durbin-Watson
1	.132[a]	.017	-.013	.20965	1.286

Notes. a. Predictors: (Constant), Intrusion, b. Dependent Variable: Management.

Figure A2

Intrusion and Management Scatter Plot

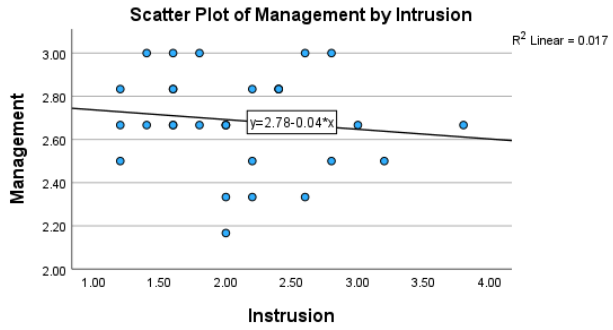

Table A7

Intrusion and Management ANOVA

Model		Sum of Squares	*df*	Mean Square	*F*	Sig.
1	Regression	.025	1	.025	.565	.458[b]
	Residual	1.407	32	.044		
	Total	1.431	33			

Notes. a. Dependent Variable: Management. b. Predictors: (Constant), Intrusion.

Table A8

Intrusion and Management Residuals

	Minimum	Maximum	Mean	SD	N
Predicted value	2.6112	2.7280	2.6863	.02743	34
Residual	-.52542	.34385	.00000	.20645	34
Std. predicted value	-2.735	1.522	.000	1.000	34
Std. residual	-2.506	1.640	.000	.985	34

Note. a. Dependent Variable: Management.

Hypothesis 1(c): Scores on the intrusion subscale of the STSS will negatively predict scores on the student engagement subscale of the TSES.

Table A9

Intrusion and Engagement Pearson's r

		Intrusion	Engagement
Intrusion	Pearson correlation	1	-.031
	Sig. (2-tailed)		.862
	N	34	34
Engagement	Pearson correlation	-.031	1
	Sig. (2-tailed)	.862	
	N	34	34

Table A10

Intrusion and Engagement Durbin-Watson

Model	*R*	R^2	Adjusted R^2	Std. Error of the Estimate	Durbin-Watson
1	.031[a]	.001	-.030	.23508	1.439

Notes. a. Predictors: (Constant), Intrusion, b. Dependent Variable: Engagement.

Figure A3

Intrusion and Engagement Scatter Plot

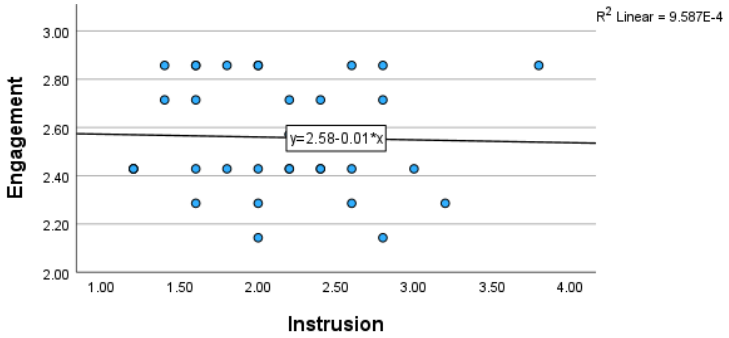

Table A11

Intrusion and Engagement ANOVA

Model		Sum of Squares	*df*	Mean Square	*F*	Sig.
1	Regression	.002	1	.002	.031	.862[b]
	Residual	1.768	32	.055		
	Total	1.770	33			

Notes. a. Dependent Variable: Engagement. b. Predictors: (Constant), Intrusion.

Table A12

Intrusion and Engagement Residuals

	Minimum	Maximum	Mean	SD	*N*
Predicted value	2.5392	2.5697	2.5588	.00717	34
Residual	-.41749	.31793	.00000	.23149	34
Std. predicted value	-2.735	1.522	.000	1.000	34
Std. residual	-1.776	1.352	.000	.985	34

Note. a. Dependent Variable: Engagement

Hypothesis 1(d): Scores on the avoidance subscale of the STSS will negatively predict scores on the instructional practices subscale of the TSES.

Table A13

Avoidance and Instruction Pearson's r

Correlations			
		Avoidance	Instruction
Avoidance	Pearson correlation	1	.046
	Sig. (2-tailed)		.795
	N	34	34
Instruction	Pearson correlation	.046	1
	Sig. (2-tailed)	.795	
	N	34	34

Table A14

Avoidance and Instruction Durbin-Watson

Model	*R*	R^2	Adjusted R^2	Std. Error of the Estimate	Durbin-Watson
1	.046[a]	.002	-.029	.25108	1.707

Notes. a. Predictors: (Constant), Avoidance, b. Dependent Variable: Instruction.

Figure A4

Avoidance and Instruction Scatter Plot

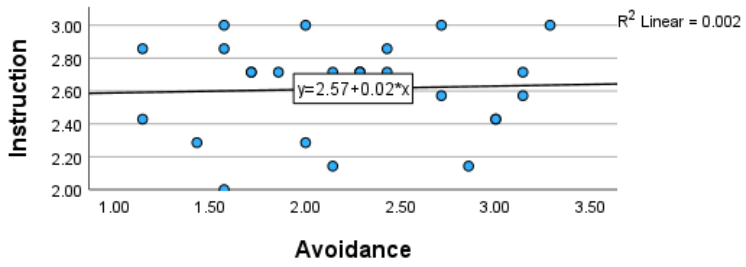

Table A15

Avoidance and Instruction ANOVA

Model		Sum of Squares	*df*	Mean Square	*F*	Sig.
1	Regression	.004	1	.004	.069	.795[b]
	Residual	2.017	32	.063		
	Total	2.022	33			

Notes. a. Dependent Variable: Instruction. b. Predictors: (Constant), Avoidance.

Table A16

Avoidance and Instruction Residuals

	Minimum	Maximum	Mean	SD	*N*
Predicted value	2.5914	2.6357	2.6134	.01147	34
Residual	-.60026	.39974	.00000	.24724	34
Std. predicted value	-1.922	1.937	.000	1.000	34
Std. residual	-2.391	1.592	.000	.985	34

Note. a. Dependent Variable: Instruction/

Hypothesis 1(e): Scores on the avoidance subscale of the STSS will negatively predict scores on the classroom management subscale of the TSES.

Table A17

Avoidance and Management Pearson's r

		Avoidance	Management
Avoidance	Pearson correlation	1	-.155
	Sig. (2-tailed)		.381
	N	34	34
Management	Pearson correlation	-.155	1
	Sig. (2-tailed)	.381	
	N	34	34

Table A18

Avoidance and Management Durbin-Watson

Model	*R*	R^2	Adjusted R^2	Std. Error of the Estimate	Durbin-Watson
1	.155a	.024	-.006	.20893	1.259

Notes. a. Predictors: (Constant), Avoidance, b. Dependent Variable: Management.

Figure A5

Avoidance and Management Scatter Plot

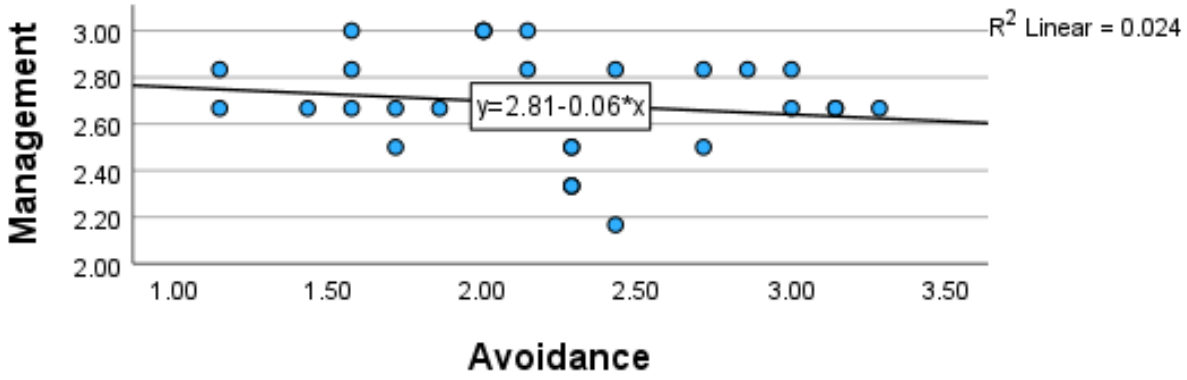

Table A19

Avoidance and Management ANOVA

Model		Sum of Squares	*df*	Mean Square	*F*	Sig.
1	Regression	.035	1	.035	.790	.381[b]
	Residual	1.397	32	.044		
	Total	1.431	33			

Note. a. Dependent Variable: Management. b. Predictors: (Constant), Avoidance.

Table A20

Avoidance and Management Residuals

	Minimum	Maximum	Mean	SD	*N*
Predicted value	2.6236	2.7484	2.6863	.03233	34
Residual	-.50688	.30981	.00000	.20574	34
Std. predicted value	-1.937	1.922	.000	1.000	34
Std. residual	-2.426	1.483	.000	.985	34

Note. a. Dependent Variable: Management.

Hypothesis 1(f): Scores on the avoidance subscale of the STSS will negatively predict scores on the student engagement subscale of the TSES.

Table A21

Avoidance and Engagement Pearson's r

		Avoidance	Engagement
Avoidance	Pearson correlation	1	.084
	Sig. (2-tailed)		.638
	N	34	34
Engagement	Pearson correlation	.084	1
	Sig. (2-tailed)	.638	
	N	34	34

Table A22

Avoidance and Engagement Durbin-Watson

Model	*R*	R^2	Adjusted R^2	Std. Error of the Estimate	Durbin-Watson
1	.084[a]	.007	-.024	.23437	1.413

Notes. a. Predictors: (Constant), Avoidance, b. Dependent Variable: Engagement.

Figure A6

Avoidance and Engagement Scatter Plot

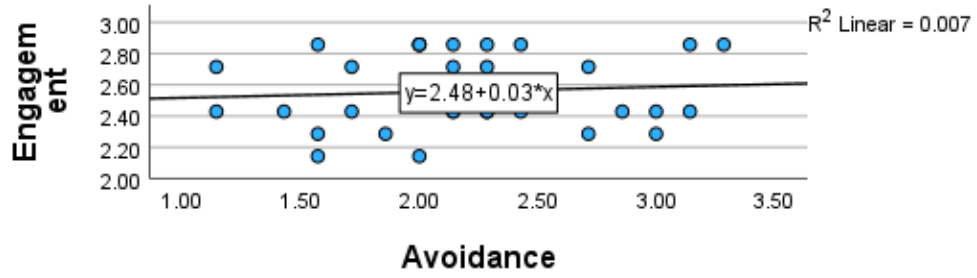

Table A23

Avoidance and Engagement ANOVA

Model		Sum of Squares	*df*	Mean Square	*F*	Sig.
1	Regression	.012	1	.012	.226	.638[b]
	Residual	1.758	32	.055		
	Total	1.770	33			

Notes. a. Dependent Variable: Engagement. b. Predictors: (Constant), Avoidance.

Table A24

Avoidance and Engagement Residuals

	Minimum	Maximum	Mean	SD	N
Predicted value	2.5215	2.5964	2.5588	.01939	34
Residual	-.40863	.32063	.00000	.23079	34
Std. predicted value	-1.922	1.937	.000	1.000	34
Std. residual	-1.744	1.368	.000	.985	34

Note. a. Dependent Variable: Engagement.

Hypothesis 1(g): Scores on the arousal subscale of the STSS will negatively predict scores on the instructional practices subscale of the TSES.

Table A25

Arousal and Instruction Pearson's r

		Arousal	Instruction
Arousal	Pearson correlation	1	-.045
	Sig. (2-tailed)		.801
	N	34	34
Instruction	Pearson correlation	-.045	1
	Sig. (2-tailed)	.801	
	N	34	34

Table A26

Arousal and Instruction Durbin-Watson

Model	*R*	R^2	Adjusted R^2	Std. Error of the Estimate	Durbin-Watson
1	.045[a]	.002	-.029	.25109	1.723

Notes. a. Predictors: (Constant), Arousal, b. Dependent Variable: Construction.

Figure A7

Arousal and Instruction Scatter Plot

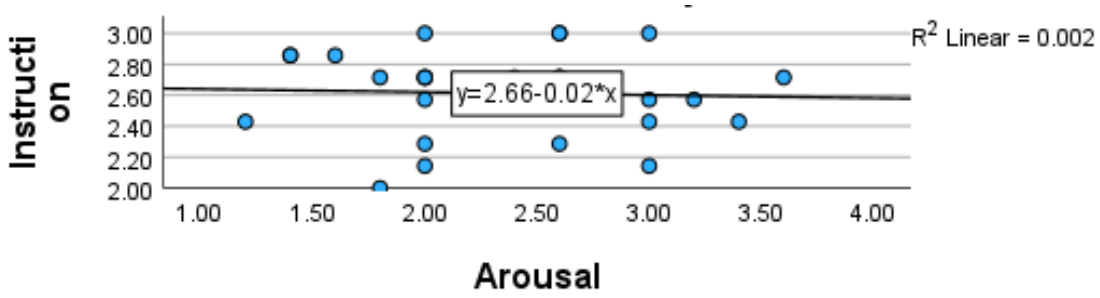

Table A27

Arousal and Instruction ANOVA

Model		Sum of Squares	*df*	Mean Square	*F*	Sig.
1	Regression	.004	1	.004	.065	.801[b]
	Residual	2.018	32	.063		
	Total	2.022	33			

Notes. a. Dependent Variable: Instruction. b. Predictors: (Constant), Arousal.

Table A28

Arousal and Instruction Residuals

	Minimum	Maximum	Mean	SD	*N*
Predicted value	2.5891	2.6357	2.6134	.01112	34
Residual	-.62406	.39923	.00000	.24726	34
Std. predicted value	-2.188	2.003	.000	1.000	34
Std. residual	-2.485	1.590	.000	.985	34

Note. a. Dependent Variable: Instruction.

Hypothesis 1(h): Scores on the arousal subscale of the STSS will negatively predict scores on the classroom management subscale of the TSES.

Table A29

Arousal and Management Pearson's r

		Arousal	Management
Arousal	Pearson correlation	1	-.093
	Sig. (2-tailed)		.602
	N	34	34
Management	Pearson correlation	-.093	1
	Sig. (2-tailed)	.602	
	N	34	34

Table A30

Arousal and Management Durbin-Watson

Model	*R*	R^2	Adjusted R^2	Std. Error of the Estimate	Durbin-Watson
1	.093[a]	.009	-.022	.21059	1.294

Notes. a. Predictors: (Constant), Arousal, b. Dependent Variable: Management.

Figure A8

Arousal and Management Scatter Plot

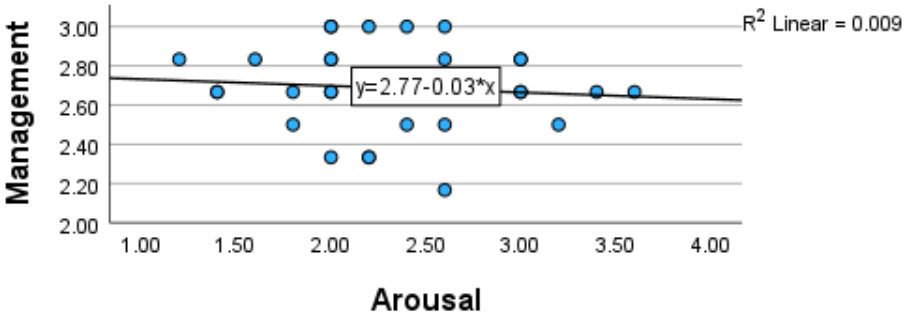

Table A31

Arousal and Management ANOVA

Model		Sum of Squares	*df*	Mean Square	*F*	Sig.
1	Regression	.012	1	.012	.277	.602[b]
	Residual	1.419	32	.044		
	Total	1.431	33			

Notes. a. Dependent Variable: Management. b. Predictors: (Constant), Arousal.

Table A32

Arousal and Management Residuals

	Minimum	Maximum	Mean	SD	*N*
Predicted value	2.6441	2.7249	2.6863	.01930	34
Residual	-.51109	.32225	.00000	.20737	34
Std. predicted value	-2.188	2.003	.000	1.000	34
Std. residual	-2.427	1.530	.000	.985	34

Note. a. Dependent Variable: Management.

Hypothesis 1(i): Scores on the arousal subscale of the STSS will negatively predict scores on the student engagement subscale of the TSES.

Table A33

Arousal and Engagement Pearson's r

		Arousal	Engagement
Arousal	Pearson correlation	1	.034
	Sig. (2-tailed)		.849
	N	34	34
Engagement	Pearson correlation	.034	1
	Sig. (2-tailed)	.849	
	N	34	34

Table A34

Arousal and Engagement Durbin-Watson

Model	*R*	R^2	Adjusted R^2	Std. Error of the Estimate	Durbin-Watson
1	.034[a]	.001	-.030	.23506	1.437

Notes. a. Predictors: (Constant), Arousal, b. Dependent Variable: Engagement.

Figure A9

Arousal and Engagement Scatter Plot

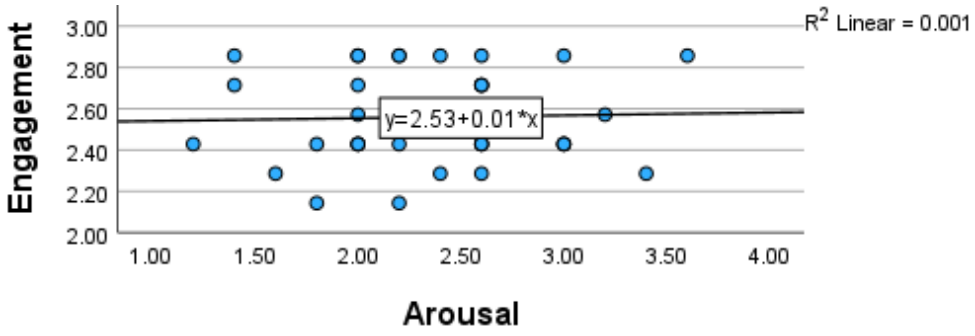

Table A35

Arousal and Engagement ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.002	1	.002	.037	.849[b]
	Residual	1.768	32	.055		
	Total	1.770	33			

Notes. a. Dependent Variable: Engagement. b. Predictors: (Constant), Arousal.

Table A36

Arousal and Engagement Residuals

	Minimum	Maximum	Mean	SD	*N*
Predicted value	2.5431	2.5760	2.5588	.00787	34
Residual	-.41395	.31133	.00000	.23147	34
Std. predicted value	-2.003	2.188	.000	1.000	34
Std. residual	-1.761	1.324	.000	.985	34

Note. a. Dependent Variable: Engagement

Appendix B: Permission for Teacher Self-Efficacy Scale Survey

William & Mary
School of Education

MEGAN TSCHANNEN-MORAN, PHD

December 29, 2023

Donna Short,

You have my permission to use the Teacher Sense of Efficacy Scale (formerly called the Ohio State Teacher Sense of Efficacy Scale), which I developed with Woolfolk Hoy, A., in your research.

You can find a copy of the measure and scoring directions on my website at https://mxtsch.pages.wm.edu/.

Please use the following as the proper citation:

> Tschannen-Moran, M & Hoy, A. W. (2001). Teacher efficacy: Capturing an elusive construct. *Teaching and Teacher Education, 17*, 783-805.

I will also attach directions you can follow to access my password-protected website, where you can find the supporting references for this measure as well as other articles I have written on this and related topics.

All the best,

Megan Tschannen-Moran
William & Mary School of Education

P.O. Box 8795 • Williamsburg, VA 23187-8795 • (757) 221-2187 • mxtsch@wm.edu

Permission for Secondary Traumatic Stress Scale Survey
Thank you! I appreciate it.
Donna Short

From: Brian Bride <bbride@gsu.edu>
Sent: Thursday, December 7, 2023 12:46 PM
To: Short, Donna Kay <dshort23@liberty.edu>
Subject: [External] Re: Secondary Traumatic Stress Scale

Permission granted.

Brian E. Bride, Ph.D., M.S.W., M.P.H.
Distinguished University Professor
School of Social Work
Andrew Young School of Policy Studies
Georgia State University
Atlanta, Georgia 30302

From: Short, Donna Kay <dshort23@liberty.edu>
Date: Thursday, December 7, 2023 at 10:29 AM
To: Brian Bride <bbride@gsu.edu>
Subject: Secondary Traumatic Stress Scale

Good morning, Dr. Bride.

My name is Donna Short, and I am currently working on my dissertation through Liberty University. I am investigating
the impact of STS on teacher self-efficacy among rural public school teachers.

That being said, I am requesting permission to use the Secondary Traumatic Stress Scale you developed.

Please let me know if I am able to do this.

Thank you for your time,

Donna Short
Liberty University

Appendix C: Institutional Review Board Exemption

LIBERTY UNIVERSITY.
INSTITUTIONAL REVIEW BOARD

June 12, 2024
Donna Short
Jeffrey McCarthy
Re: IRB Exemption - IRB-FY23-24-1391 The Moderating Effect of Teacher Experience on Secondary Traumatic Stress and Teacher Self-Efficacy Among Rural Public School Teachers
Dear Donna Short, Jeffrey McCarthy,
The Liberty University Institutional Review Board (IRB) has reviewed your application per the Office for Human Research Protections (OHRP) and Food and Drug Administration (FDA) regulations and finds your study to be exempt from further IRB review. This means you may begin your research with the data-safeguarding methods described in your IRB application, and no further IRB oversight is required.
Your study falls under the following exemption category, which identifies specific situations in which human participants research is exempt from the policy set forth in 45 CFR 46:104(d):
Category 2.(i). Research that only includes interactions involving educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures, or observation of public behavior (including visual or auditory recording) if at least one of the following criteria is met:
The information obtained is recorded by the investigator in such a manner that the identity of the human subjects cannot readily be ascertained, directly or through identifiers linked to the subjects;
For a PDF of your exemption letter, click on your study number in the My Studies card on your Cayuse dashboard.
Next, click the Submissions bar beside the Study Details bar on the Study Details page. Finally, click Initial under Submission Type and choose the Letters tab toward the bottom of the Submission Details page. Your information sheet and final versions of your study documents, which you must use to conduct your study, can also be found on the same page under the Attachments tab.
This exemption only applies to your current research application, and any modifications to your protocol must be reported to the Liberty University IRB for verification of continued exemption status. You may report these changes by completing a modification submission through your Cayuse IRB account.
If you have any questions about this exemption or need assistance in determining whether possible modifications to your protocol would change your exemption status, please email us at irb@liberty.edu.
Sincerely,
G. Michele Baker, PhD, CIP
Administrative Chair

Research Ethics Office

Study Information

Title of the Project: The Moderating Effect of Teacher Experience on Secondary Traumatic Stress and Teacher Self-Efficacy Among Rural Public School Teachers
Principal Investigator: Donna Short, Doctoral Candidate, School of Behavioral Sciences, Liberty University

Invitation to be Part of a Research Study

You are invited to participate in a research study. To participate, you must be a current, full-time teacher in a rural public school in Texas (A rural district is defined by the Texas Education Agency as one with a total student population of less than 300 students). Taking part in this research project is voluntary.

Please take time to read this entire form and ask questions before deciding to take part in this research.

What is the study about and why is it being done?

The purpose of this study is to investigate the impact of secondary traumatic stress on teacher self-efficacy among rural public school teachers. Research investigating secondary traumatic stress is abundant among help professionals (i.e. first responders, professional counselors); however, there is minimal research investigating rural public school teachers.

What will happen if you take part in this study?

If you agree to be in this study, I will ask you to do the following:

1. Complete an online survey, which will take 10-15 minutes. The survey will consist of the provided Teacher Self-Efficacy Survey and the Secondary Traumatic Stress Survey. The surveys will be active for 2 weeks.

How could you or others benefit from this study?

Participants should not expect to receive a direct benefit from taking part in this study.

Benefits to society includes additional research demonstrating the impact of secondary traumatic stress on teacher self-efficacy. Teachers are exposed to the traumatic experiences of students daily. There is minimal research investigating the impact of this exposure on rural public school teachers. The study will provide research and recommendations to aid rural public school teachers when faced with traumatic exposure.

What risks might you experience from being in this study?

The expected risks from participating in this study are minimal, which means they are equal to the risks you would encounter in everyday life.

How will personal information be protected?

The records will be kept private. Research records will be stored securely, and only the researcher will have access to the records.

- All participant responses to the online surveys will be anonymous.

- Data will be stored on a password-locked computer. After three years, all electronic records will be deleted.

Is study participation voluntary?

Participation in this study is voluntary. Your decision to participate will not affect your current or future relations to Liberty University. If you decide to participate, you are free to not answer any question or withdraw at any time prior to submitting the survey without affecting those relationships.

What should you do if you decide to withdraw from the study?

If you to withdraw from the study, please exit the survey and close your internet browser. Your responses will not be recorded or included in the study.

Whom do you contact if you have questions or concerns about the study?

The researcher conducting this study is Donna Short. You may ask any questions you have now. If you have questions later, **you are encouraged** to contact her at dshort23@liberty.edu. You may also contact the researcher's faculty sponsor, Dr. Jeffrey McCarthy, at jamccarthy@liberty.edu.

Whom do you contact if you have questions about your rights as a research participant?

If you have questions or concerns regarding this study and would like to talk to someone other than the researcher, **you are encouraged** to contact the IRB. Our physical address is Institutional Review Board, 1971 University Blvd, Green Hall Ste. 2845, Lynchburg, VA, 24515; our phone number is 434-592-5530, and our email address is irb@liberty.edu.

Disclaimer: The Institutional Review Board (IRB) is tasked with ensuring that human subjects research will be conducted in an ethical manner as defined and required by federal regulations. The topics covered and viewpoints expressed or alluded to by student and faculty researchers are those of the researchers and do not necessarily reflect the official policies or positions of Liberty University.

Participant Consent Form

Consent

Title of the Project: The Moderating Effect of Teacher Experience on Secondary Traumatic Stress and Teacher Self-Efficacy Among Rural Public School Teachers.

Principal Investigator: Donna Short, Doctoral Candidate, School of Behavioral Sciences, Liberty University.

Invitation to be a Part of a Research Study

You are invited to participate in a research study. To participate you must currently be a full-time teacher in a rural public school. Taking part in this research project is voluntary.
Please take time to read this entire form and ask questions before deciding to take part in this research.

What is the study about and why is it being done?

The purpose of this study is to investigate the impact of secondary traumatic stress on teacher self-efficacy among rural public school teachers. Research investigating secondary traumatic stress is abundant among help professionals (i.e. first responders, professional counselors); however, there is minimal research investigating rural public school teachers.

What will happen if you take part in this study?

If you agree to be in this study, I will ask you to do the following:

2. Read and complete the provided consent form.
3. Complete the provided Teacher Self-Efficacy Survey and the Secondary Traumatic Stress Survey.
4. The surveys will take approximately 20-30 minutes. The surveys will be active for 2 weeks.

What will happen if you take part in this study?

Participants should not expect to receive a direct benefit from taking part in this study. Benefits to society includes additional research demonstrating the impact of secondary traumatic stress on teacher self-efficacy. Teachers are exposed to the traumatic experiences of students daily. There is minimal research investigating the impact of this exposure on rural public school teachers. The study will provide research and recommendations to aid rural public school teachers when faced with traumatic exposure.

What risks might you experience from being in this study?

The expected risks from participating in this study are minimal, which means they are equal to the risks you would encounter in everyday life.

How will personal information be protected?

The records will be kept private. Published reports will not include any information that will make possible to identify the subject. All participant responses to the online surveys will be anonymous. Research records will be stored securely, and on the researcher will have access to the records.
Data will be stored on a password-locked computer. After three years, all electronic records will be deleted and all hardcopies will be shredded.

Is study participation voluntary?

Participation in this study is voluntary. Your decision to participate will not affect your current or future relations to Liberty University. If you decide to participate, you are free to no answer any question or withdraw at any time without affecting those relationships.

What should you do if you decide to withdraw from the study?

If you to withdraw from the study, please exit the survey and close your internet browser. Your responses will not be recorded or included in the study.

Whom do you contact if you have questions or concerns about the study?

The researcher conducting this study is Donna Short. You may ask any questions you have now. If you have questions later, **you are encouraged** to contact her at dshort23@liberty.edu. You may also contact the researcher's faculty sponsor, Dr. Jeffrey McCarthy, at jamccarthy@liberty.edu.

Whom do you contact if you have questions about your rights as a participant?

If you have questions or concerns regarding this study and would like to talk to someone other than the researcher, **you are encouraged** to contact the IRB. Our physical address is Institutional Review Board, 1971 University Blvd, Green Hall Ste. 2845, Lynchburg, VA, 24515; our phone number is 434-592-5530, and our email address is irb@liberty.edu.

Disclaimer: The Institutional Review Board (IRB) is tasked with ensuring that human subjects research will be conducted in an ethical manner as defined and required by federal regulations. The topics covered and viewpoints expressed or alluded to by student and faculty researchers are those of the researchers and do not necessarily reflect the official policies or positions of Liberty University.

Your Consent

Before agreeing to be a part of the research, please be sure that you understand what the study is about. You can print a copy of the document for your records. If you have any questions about the study later, you can contact Donna Short using the information provided above.

I have read and understood the above information. I have asked questions and have received answers. I consent to participate in the study.

_____

Printed Subject Name

_____

Signature & Date

Recruitment Email

Dear Potential Participant,

As a doctoral candidate, in the School of Behavioral Sciences at Liberty University, I am conducting research investigating the impact of secondary traumatic stress on teacher self-efficacy among rural public school teachers as a part of the requirements for a doctoral degree. The purpose of my research is to investigate secondary traumatic stress and its impact on teacher self-efficacy, and I am writing to invite you to join my study.

Participants must currently be full-time teachers in a rural public school. Participants will be asked to take an anonymous, online survey. It should take approximately 5-10 minutes to complete. Participation will be completely anonymous, and no personal, identifying information will be collected.

Participants will complete the following anonymous online survey. Please click: https://liberty.co1.qualtrics.com/jfe/form/SV_bOXx2nrKQc5g3ci to complete the survey. A consent document is provided as the first page of the survey to see if you meet the study criteria. Further, the consent document contains additional information about my research.

Because participation is anonymous, you do not need to sign and return the consent document unless you would prefer to do so. After you have read the consent form, please click https://liberty.co1.qualtrics.com/jfe/form/SV_bOXx2nrKQc5g3ci to proceed to complete the survey. Doing so will indicate that you have read the consent information and would like to take part in the study.